STIC SEARCH RESULTS FEEDBACK FORM

Biotech-Chem Library

Questions about the scope or the results of the search? Contact ***the searcher or contact:***

Mary Hale, Information Branch Supervisor
Remsen Bldg. 01 D86
571-272-2507

Voluntary Results Feedback Form

- *I am an examiner in Workgroup:* ☐ *Example: 1610*
- *Relevant prior art **found**, search results used as follows:*
  - ☐ 102 rejection
  - ☐ 103 rejection
  - ☐ Cited as being of interest.
  - ☐ Helped examiner better understand the invention.
  - ☐ Helped examiner better understand the state of the art in their technology.

  Types of relevant prior art found:
  - ☐ Foreign Patent(s)
  - ☐ Non-Patent Literature
    (journal articles, conference proceedings, new product announcements etc.)
- *Relevant prior art **not found:***
  - ☐ Results verified the lack of relevant prior art (helped determine patentability).
  - ☐ Results were not useful in determining patentability or understanding the invention.

Comments:

Drop off or send completed forms to STIC-Biotech-Chem Library, Remsen Bldg.

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09.782.306 11


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=> fil reg; d ide
FILE 'REGISTRY' ENTERED AT 15:39:15 ON 14 JUL 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES:   13 JUL 2005  HIGHEST RN 854992-86-2
DICTIONARY FILE UPDATES:  13 JUL 2005  HIGHEST RN 854992-86-2

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

**********************************************************************
*                                                                    *
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added,   *
* effective March 20, 2005.  A new display format, IDERL, is now    *
* available and contains the CA role and document type information. *
*                                                                    *
**********************************************************************

Crossover limits have been increased.  See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html


L25  ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2005 ACS on STN
RN   329900-75-6  REGISTRY
ED   Entered STN:  04 Apr 2001
CN   Synthetase, prostaglandin endoperoxide, 2 (9CI)  (CA INDEX NAME)
OTHER NAMES:
CN   Arachidonate cyclooxygenase 2
CN   COX-2
CN   Cyclooxygenase 2
CN   Cyclooxygenase II
CN   Prostaglandin endoperoxidase synthase 2
CN   Prostaglandin endoperoxide H synthase-2
CN   Prostaglandin endoperoxide synthase-2
CN   Prostaglandin endoperoxide synthetase 2
CN   Prostaglandin G/H synthase-2
CN   Prostaglandin H synthase-2
MF   Unspecified
CI   MAN
SR   CA
LC   STN Files:   BIOSIS, CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**
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6820 REFERENCES IN FILE CA (1907 TO DATE)
7 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
6901 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> □

=> fil reg; d stat que l22; fil capl; d que nos l30
FILE 'REGISTRY' ENTERED AT 15:45:48 ON 14 JUL 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 13 JUL 2005 HIGHEST RN 854992-86-2
DICTIONARY FILE UPDATES: 13 JUL 2005 HIGHEST RN 854992-86-2

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

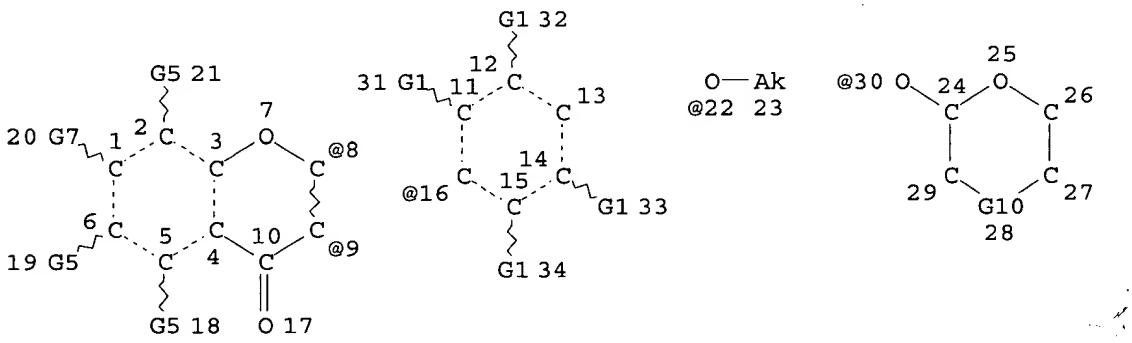
Please note that search-term pricing does apply when conducting SmartSELECT searches.

****
* *
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added, *
* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
* *
****

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

L8 STR



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VPA 16-8/9 U
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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
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NUMBER OF NODES IS 34

STEREO ATTRIBUTES: NONE
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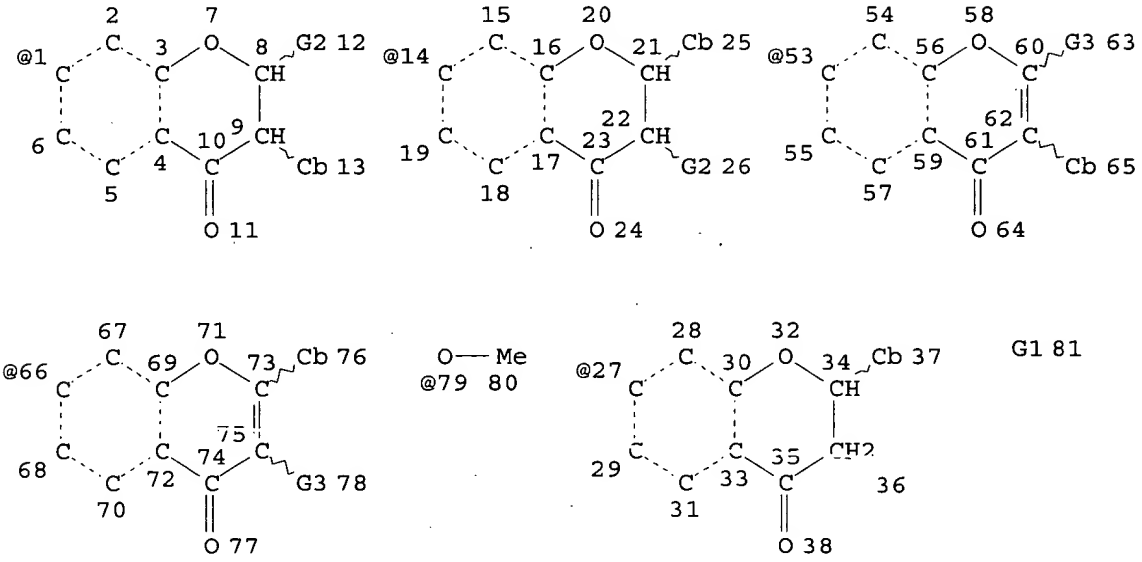
L17 STR



Page 1-A

Page 2-A
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VAR G3=H/OH/79
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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
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subset search done looking for this structure & structure on the following page

NUMBER OF NODES IS 79

STEREO ATTRIBUTES: NONE
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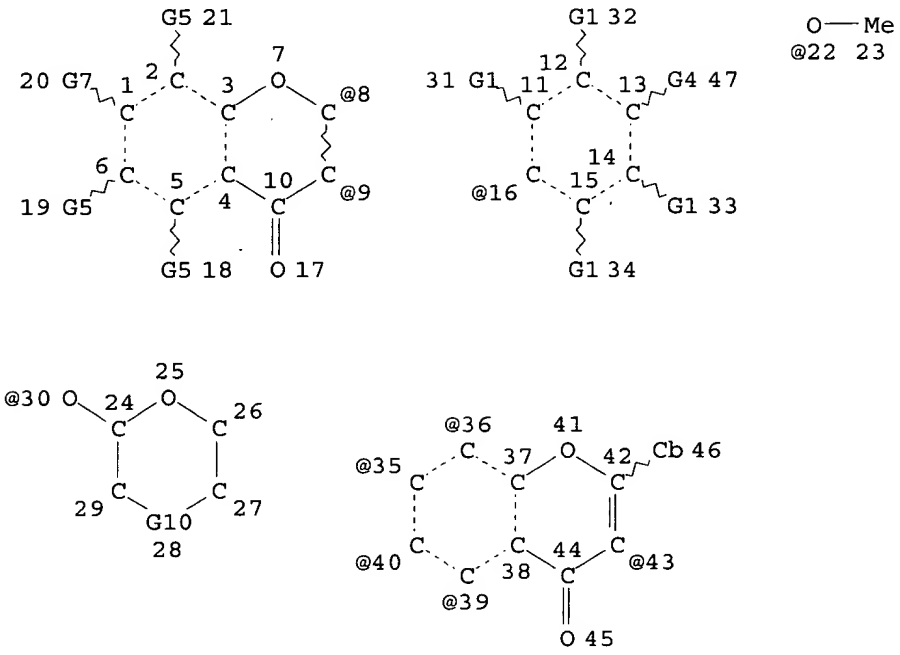

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VAR G7=H/OH/22/30
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VPA 16-8/9 U
NODE ATTRIBUTES:
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GGCAT IS MCY LOC UNS AT 46
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 47

STEREO ATTRIBUTES: NONE
L22 1370 SEA FILE=REGISTRY SUB=L10 SSS FUL (L17 AND L20)

100.0% PROCESSED 15296 ITERATIONS 1370 ANSWERS
SEARCH TIME: 00.00.01

FILE 'CAPLUS' ENTERED AT 15:45:48 ON 14 JUL 2005

FILE COVERS 1907 - 14 Jul 2005 VOL 143 ISS 3
FILE LAST UPDATED: 13 Jul 2005 (20050713/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.
'OBI' IS DEFAULT SEARCH FIELD FOR 'CAPLUS' FILE

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L8              STR
L10         15296 SEA FILE=REGISTRY SSS FUL L8
L17             STR
L20             STR
L22          1370 SEA FILE=REGISTRY SUB=L10 SSS FUL (L17 AND L20)
L24         19296 SEA FILE=CAPLUS ABB=ON  (NF/OBI OR NUCLEAR FACTOR/OBI)(W).KAPPA
                  ./OBI(W)B/OBI
L25             1 SEA FILE=REGISTRY ABB=ON  329900-75-6
L26          1643 SEA FILE=CAPLUS ABB=ON  L22(L)(THU OR PAC OR PKT OR DMA OR
                  BAC)/RL
L27          9735 SEA FILE=CAPLUS ABB=ON  L25 OR (CYCLOOXYGENASE/OBI OR CYCLO
                  OXYGENASE/OBI OR COX/OBI)(W)2/OBI OR COX2/OBI
L29            41 SEA FILE=CAPLUS ABB=ON  (L24 OR L27)(L)(INHIB?/OBI OR BLOCK?/OB
                  I OR ANTAG?/OBI) AND L22
L30            36 SEA FILE=CAPLUS ABB=ON  L29 AND L26
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Role
THU - therapeutic use
PAC - pharmacologic activity
PKT - pharmacokinetics
DMA - drug mechanism of action
BAC - Biological activity

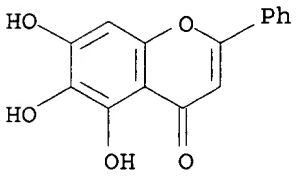
=> d ibib ed abs hitstr l30 1-36

L30 ANSWER 1 OF 36 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2005:330607 CAPLUS
DOCUMENT NUMBER: 142:475554
TITLE: Baicalein, a component of Scutellaria radix from Huang-Lian-Jie-Du-Tang (HLJDT), leads to suppression of proliferation and induction of apoptosis in human myeloma cells
AUTHOR(S): Ma, Zi; Otsuyama, Ken-ichiro; Liu, Shangqin; Abroun, Saeid; Ishikawa, Hideaki; Tsuyama, Naohiro; Obata, Masanori; Li, Fu-Jun; Zheng, Xu; Maki, Yasuko; Miyamoto, Koji; Kawano, Michio M.
CORPORATE SOURCE: Department of Bio-Signal Analysis, Applied Medical Engineering Science (AMES), Graduate School of Medicine, Yamaguchi University, Yamaguchi, Japan
SOURCE: Blood (2005), 105(8), 3312-3318
CODEN: BLOOAW; ISSN: 0006-4971
PUBLISHER: American Society of Hematology
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 18 Apr 2005
AB In the search for a more effective adjuvant therapy to treat multiple myeloma (MM), the authors investigated the effects of the traditional

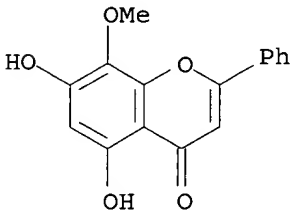
Chinese herbal medicines Huang-Lian-Jie-Du-Tang (HLJDT), Gui-Zhi-Fu-Ling-Wan (GZFLW), and Huang-Lian-Tang (HLT) on the proliferation and apoptosis of myeloma cells. HLJDT inhibited the proliferation of myeloma cell lines and the survival of primary myeloma cells, especially MPC-1- immature myeloma cells, and induced apoptosis in myeloma cell lines via a mitochondria-mediated pathway by reducing mitochondrial membrane potential and activating caspase-9 and caspase-3. Further expts. confirmed that Scutellaria radix was responsible for the suppressive effect of HLJDT on myeloma cell proliferation, and the baicalein in Scutellaria radix showed strong growth inhibition and induction of apoptosis in comparison with baicalin or wogonin. Balcalein as well as baicalin suppressed the survival in vitro of MPC-1- immature myeloma cells rather than MPC-1+ myeloma cells from myeloma patients. Baicalein inhibited the phosphorylation of IkB-α, which was followed by decreased expression of the IL-6 and XIAP genes and activation of caspase-9 and caspase-3. Therefore, HLJDT and Scutellaria radix have an antiproliferative effect on myeloma cells, especially MPC-1- immature myeloma cells, and baicalein may be responsible for the suppressive effect of Scutellaria radix by blocking IkB-α degradation

IT **491-67-8**, Baicalein **632-85-9**, Wogonin **21967-41-9**, Baicalin
RL: **PAC (Pharmacological activity)**; **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(baicalein leads to suppression of proliferation and induction of apoptosis in human myeloma cells)

RN 491-67-8 CAPLUS
CN 4H-1-Benzopyran-4-one, 5,6,7-trihydroxy-2-phenyl- (9CI) (CA INDEX NAME)

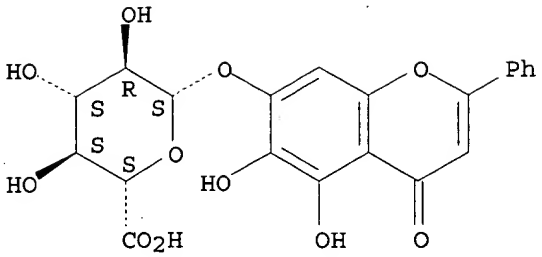


RN 632-85-9 CAPLUS
CN 4H-1-Benzopyran-4-one, 5,7-dihydroxy-8-methoxy-2-phenyl- (9CI) (CA INDEX NAME)



RN 21967-41-9 CAPLUS
CN β-D-Glucopyranosiduronic acid, 5,6-dihydroxy-4-oxo-2-phenyl-4H-1-benzopyran-7-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.

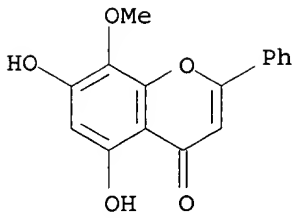


REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

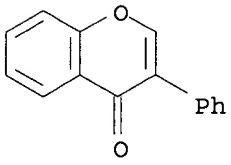
L30 ANSWER 2 OF 36 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2005:123199 CAPLUS
DOCUMENT NUMBER: 142:191239
TITLE: Botanical extract compositions comprising phytoestrogens and methods of use
INVENTOR(S): Chen, Sophie
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 36 pp., Cont.-in-part of U.S. Ser. No. 384,405, abandoned.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2005032882	A1	20050210	US 2003-647458		20030801
PRIORITY APPLN. INFO.:			US 2002-362420P	P	20020306
			US 2002-374417P	P	20020422
			US 2003-384405	B2	20030306

OTHER SOURCE(S): MARPAT 142:191239
ED Entered STN: 13 Feb 2005
AB A composition having phytoestrogenic and anti-cancer activity is described. The composition comprises wogonin, isoliquiritigenin, coumestrol, their pharmaceutically acceptable salts or esters, their selectively substituted analogs, or combinations thereof. The compns. may also include an anti-cancer agent and/or an immune stimulant. A method for treating or preventing cancer or an estrogen-related disorder includes administering a therapeutically effective amount of the compns. is described. The compns. are particularly useful in the treatment of hormone-related cancers.
IT **632-85-9P**, Wogonin
RL: NPO (Natural product occurrence); **PAC (Pharmacological activity)**; PRP (Properties); PUR (Purification or recovery); **THU (Therapeutic use)**; BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses)
(botanical extract compns. comprising phytoestrogens in combination with anti-cancer agents and immunostimulants for treatment of cancer and estrogen-related disorders)
RN 632-85-9 CAPLUS
CN 4H-1-Benzopyran-4-one, 5,7-dihydroxy-8-methoxy-2-phenyl- (9CI) (CA INDEX NAME)



IT **574-12-9D**, Isoflavone, derivs.
RL: **PAC (Pharmacological activity)**; **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(botanical extract compns. comprising phytoestrogens in combination with anti-cancer agents and immunostimulants for treatment of cancer and estrogen-related disorders)
RN 574-12-9 CAPLUS
CN 4H-1-Benzopyran-4-one, 3-phenyl- (9CI) (CA INDEX NAME)



IT **329900-75-6**, **Cyclooxygenase 2**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(**inhibition**; botanical extract compns. comprising phytoestrogens in combination with anti-cancer agents and immunostimulants for treatment of cancer and estrogen-related disorders)
RN 329900-75-6 CAPLUS
CN Synthetase, prostaglandin endoperoxide, 2 (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L30 ANSWER 3 OF 36 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2005:99157 CAPLUS
DOCUMENT NUMBER: 142:170033
TITLE: Methods and compositions for the treatment or prevention of human immunodeficiency virus and related conditions using **cyclooxygenase-2** selective **inhibitors** and antiviral agents
INVENTOR(S): Maziasz, Timothy
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 172 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

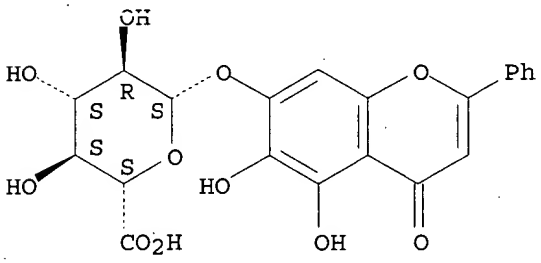
PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2005026902	A1	20050203	US 2004-769485		20040130
PRIORITY APPLN. INFO.:			US 2003-443910P	P	20030131

OTHER SOURCE(S): MARPAT 142:170033

ED Entered STN: 04 Feb 2005
AB The present invention provides compns. and methods for the treatment of human immunodeficiency virus (HIV) infection as well as HIV associated diseases and related disorders. More particularly, the invention provides a combination therapy for the treatment of HIV infection as well as HIV associated diseases and related disorders comprising the administration to a subject of an anti-human immunodeficiency virus agent in combination with a cyclooxygenase-2 selective inhibitor or an isomer or a pharmaceutically acceptable salt, ester, or prodrug thereof.
IT **329900-75-6, Cyclooxygenase-2**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(methods and compns. for treatment or prevention of HIV infection and related conditions using **cyclooxygenase-2** selective **inhibitors** and antiviral agents)
RN 329900-75-6 CAPLUS
CN Synthetase, prostaglandin endoperoxide, 2 (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IT **21967-41-9**
RL: BSU (Biological study, unclassified); **PAC (Pharmacological activity)**; **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(methods and compns. for treatment or prevention of HIV infection and related conditions using **cyclooxygenase-2** selective **inhibitors** and antiviral agents)
RN 21967-41-9 CAPLUS
CN β-D-Glucopyranosiduronic acid, 5,6-dihydroxy-4-oxo-2-phenyl-4H-1-benzopyran-7-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.

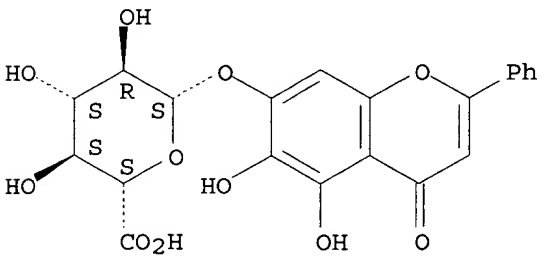


L30 ANSWER 4 OF 36 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:1155437 CAPLUS
DOCUMENT NUMBER: 142:367049
TITLE: Inhibitory effect of chunghuldan in prostaglandin E2 and nitric oxide biosynthesis of lipopolysaccharide-induced RAW 264.7 cells
AUTHOR(S): Cho, Ki-Ho; Kim, Young-Suk; Bae, Hyung-Sup; Moon, Sang-Kwan; Jung, Woo Sang; Park, Eun-Kyung; Kim, Dong-Hyun
CORPORATE SOURCE: College of Oriental Medicine, Kyung Hee University, Seoul, 130-701, S. Korea
SOURCE: Biological & Pharmaceutical Bulletin (2004), 27(11), 1810-1813
CODEN: BPBLEO; ISSN: 0918-6158
PUBLISHER: Pharmaceutical Society of Japan
DOCUMENT TYPE: Journal
LANGUAGE: English

ED Entered STN: 30 Dec 2004
AB Chunghyuldan (Daio-Orengedokuto in Japanese) (CHD) was used as an antihyperlipidemic and antiischemic agent in Korea. To evaluate in vitro the efficacy of Chunghyuldans (CHDs) metabolized with and without human intestinal microflora against brain ischemia, the authors investigated its anti-inflammatory effect on LPS-induced RAW264.7 cells. Both metabolized CHD (MCHD) and CHD showed antioxidant activities in vitro, and inhibited nitric oxide (NO) and prostaglandin E2 (PGE2) productions in lipopolysaccharide (LPS)-induced RAW264.7 cells. These also inhibited enzyme activities and protein expressions of inducible NO synthase and cyclooxygenase-2 in LPS-induced RAW264.7 cells. MCHD-inhibitory activity against NO and PGE2 productions in LPS-induced RAW264.7 cells was more potent than those of CHD. These results suggest that CHD may show potent anti-inflammatory activity in vivo and can improve brain ischemia.
IT **329900-75-6**, **Cyclooxygenase 2**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(**inhibitory** effect of chunghuldan in prostaglandin E2 and NO biosynthesis of lipopolysaccharide-induced RAW 264.7 cells)
RN 329900-75-6 CAPLUS
CN Synthetase, prostaglandin endoperoxide, 2 (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IT **21967-41-9**, Baicalin
RL: **PAC (Pharmacological activity)**; **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(inhibitory effect of chunghuldan in prostaglandin E2 and NO biosynthesis of lipopolysaccharide-induced RAW 264.7 cells)
RN 21967-41-9 CAPLUS
CN β-D-Glucopyranosiduronic acid, 5,6-dihydroxy-4-oxo-2-phenyl-4H-1-benzopyran-7-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



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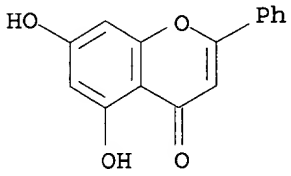
L30 ANSWER 5 OF 36 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:1043376 CAPLUS
DOCUMENT NUMBER: 142:168960
TITLE: On the role of polarizability in QSAR
AUTHOR(S): Verma, Rajeshwar P.; Kurup, Alka; Hansch, Corwin
CORPORATE SOURCE: Department of Chemistry, Pomona College, Claremont, CA, 91711, USA
SOURCE: Bioorganic & Medicinal Chemistry (2004), Volume Date 2005, 13(1), 237-255
CODEN: BMECEP; ISSN: 0968-0896
PUBLISHER: Elsevier Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

ED Entered STN: 06 Dec 2004
AB The polarizability of a mol., an important phys. property, is currently attracting our attention particularly in the area of QSAR for chemical-biol. interactions. In this report, the polarizability effects on ligand-substrate interactions has been discussed in terms of NVE (number of valence electrons) using additive values for valence electrons and the formulation of a total number of 51 QSAR. The QSAR model can be illustrated by Eq. I. log 1/C = a(NVE) ± constant
IT **329900-75-6, Cyclooxygenase-2**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(**COX-2, inhibitors** :: \; role of polarizability in QSAR)
RN 329900-75-6 CAPLUS
CN Synthetase, prostaglandin endoperoxide, 2 (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IT **480-40-0 520-28-5 525-82-6**
RL: **PAC (Pharmacological activity)**; BIOL (Biological study)
(role of polarizability in QSAR)
RN 480-40-0 CAPLUS
CN 4H-1-Benzopyran-4-one, 5,7-dihydroxy-2-phenyl- (9CI) (CA INDEX NAME)



RN 520-28-5 CAPLUS
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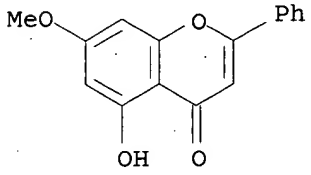

RN 525-82-6 CAPLUS
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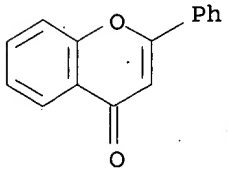


REFERENCE COUNT: 54 THERE ARE 54 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 6 OF 36 CAPLUS COPYRIGHT 2005 ACS on STN

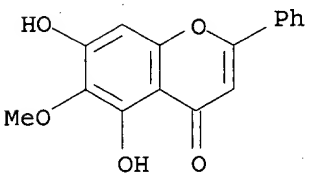
ACCESSION NUMBER: 2004:872698 CAPLUS
DOCUMENT NUMBER: 141:360715
TITLE: Formulation of dual cyclooxygenase (COX) and lipoxygenase (LOX) inhibitors for mammalian skin care
INVENTOR(S): Jia, Qi; Burnett, Bruce
PATENT ASSIGNEE(S): Unigen Pharmaceuticals, Inc., USA
SOURCE: PCT Int. Appl., 69 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004089392	A1	20041021	WO 2004-US10279	20040402
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2004220119	A1	20041104	US 2004-817330	20040402
PRIORITY APPLN. INFO.:			US 2003-460736P P	20030404

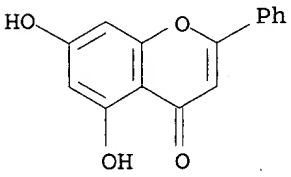
OTHER SOURCE(S): MARPAT 141:360715
ED Entered STN: 21 Oct 2004
AB The invention provides a composition of matter comprised of a mixture of two specific classes of compds., free-B-ring flavonoids and flavans, for use in the prevention and treatment of diseases and conditions associated with the skin. The composition simultaneously inhibits cyclooxygenase (COX) and lipoxygenase (LOX) enzymic activity in normal, aged and damaged dermal cells and tissues. The invention further provides a method for the prevention and treatment of diseases and conditions of the skin mediated by COX and LOX. The method for preventing and treating COX-2- and 5-LOX-mediated diseases and conditions of the skin comprises topically administering to a host in need thereof a therapeutically effective amount of a composition comprising a mixture of free-B-ring flavonoids and flavans synthesized and/or isolated from a single plant or multiple plants, preferably in the Scutellaria and Acacia genus of plants and pharmaceutically and/or cosmetically acceptable carriers. Finally, the invention provides a method for the prevention and treatment of COX- and LOX-mediated diseases and conditions, including but not limited to sun burns, thermal burns, acne, topical wounds, minor inflammatory conditions caused by fungal, microbial and viral infections, vitiligo, systemic lupus erythromatosus, psoriasis, carcinoma, melanoma, other mammalian skin cancers, skin damage from exposure to UV radiation, chems., heat, wind and dry environments, wrinkles, saggy skin, lines and dark circles around the eyes, dermatitis and other allergy-related conditions of the skin. Use of the composition of the invention also affords the benefit of smooth and youthful skin with improved elasticity, reduced and delayed aging, enhanced youthful appearance and texture, and increased flexibility, firmness, smoothness and suppleness.
IT **329900-75-6**, **Cyclooxygenase 2**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(dual cyclooxygenase and lipoxygenase **inhibitors** for

mammalian skin care)
RN 329900-75-6 CAPLUS
CN Synthetase, prostaglandin endoperoxide, 2 (9CI) (CA INDEX NAME)

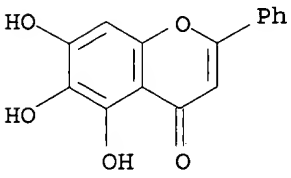
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IT **480-11-5**, Oroxylin A **480-40-0**, Chrysin **491-67-8**
, Baicalein **632-85-9**, Wogonin **4443-09-8**, Norwogonin
21967-41-9, Baicalin **29550-13-8**, 5,6-Dihydroxy-7-
methoxyflavone **35775-49-6**, Chrysin-7-glucuronide
36948-76-2 38183-03-8, 7,8-Dihydroxyflavone
51059-44-0, Wogonin-7-glucuronide **123549-16-6**
RL: COS (Cosmetic use); **PAC (Pharmacological activity)**; **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(dual cyclooxygenase and lipoxygenase inhibitors for mammalian skin care)
RN 480-11-5 CAPLUS
CN 4H-1-Benzopyran-4-one, 5,7-dihydroxy-6-methoxy-2-phenyl- (9CI) (CA INDEX NAME)



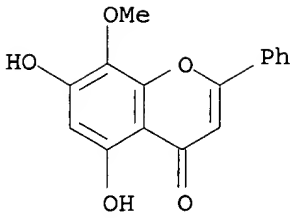
RN 480-40-0 CAPLUS
CN 4H-1-Benzopyran-4-one, 5,7-dihydroxy-2-phenyl- (9CI) (CA INDEX NAME)



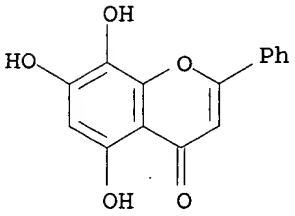
RN 491-67-8 CAPLUS
CN 4H-1-Benzopyran-4-one, 5,6,7-trihydroxy-2-phenyl- (9CI) (CA INDEX NAME)



RN 632-85-9 CAPLUS
CN 4H-1-Benzopyran-4-one, 5,7-dihydroxy-8-methoxy-2-phenyl- (9CI) (CA INDEX NAME)

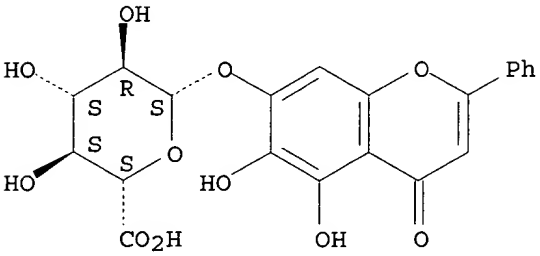


RN 4443-09-8 CAPLUS
CN 4H-1-Benzopyran-4-one, 5,7,8-trihydroxy-2-phenyl- (9CI) (CA INDEX NAME)

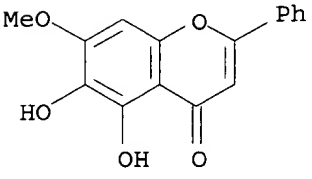


RN 21967-41-9 CAPLUS
CN β-D-Glucopyranosiduronic acid, 5,6-dihydroxy-4-oxo-2-phenyl-4H-1-benzopyran-7-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.

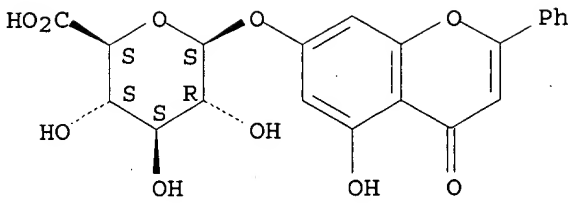


RN 29550-13-8 CAPLUS
CN 4H-1-Benzopyran-4-one, 5,6-dihydroxy-7-methoxy-2-phenyl- (9CI) (CA INDEX NAME)



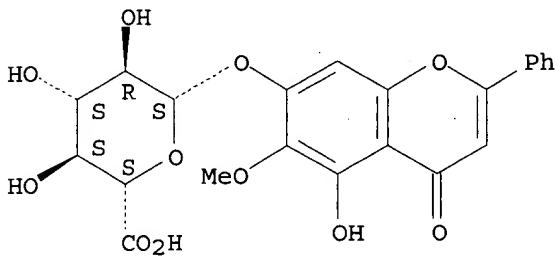
RN 35775-49-6 CAPLUS
CN β-D-Glucopyranosiduronic acid, 5-hydroxy-4-oxo-2-phenyl-4H-1-benzopyran-7-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.

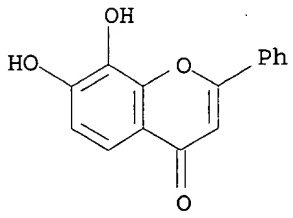


RN 36948-76-2 CAPLUS
CN β-D-Glucopyranosiduronic acid, 5-hydroxy-6-methoxy-4-oxo-2-phenyl-4H-1-benzopyran-7-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.

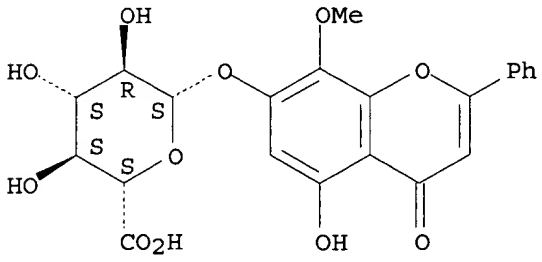


RN 38183-03-8 CAPLUS
CN 4H-1-Benzopyran-4-one, 7,8-dihydroxy-2-phenyl- (9CI) (CA INDEX NAME)



RN 51059-44-0 CAPLUS
CN β-D-Glucopyranosiduronic acid, 5-hydroxy-8-methoxy-4-oxo-2-phenyl-4H-1-benzopyran-7-yl (9CI) (CA INDEX NAME)

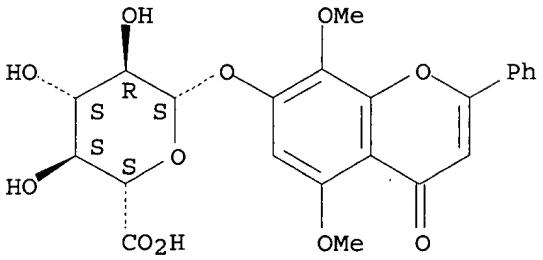
Absolute stereochemistry.



RN 123549-16-6 CAPLUS
CN β-D-Glucopyranosiduronic acid, 5,8-dimethoxy-4-oxo-2-phenyl-4H-1-

benzopyran-7-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



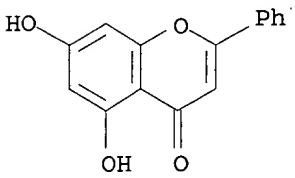
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 7 OF 36 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:734738 CAPLUS
DOCUMENT NUMBER: 141:307052
TITLE: Flavonoids **inhibit** tumor necrosis factor-α-induced up-regulation of intercellular adhesion molecule-1 (ICAM-1) in respiratory epithelial cells through activator protein-1 and **nuclear factor-.kappa.B**: Structure-activity relationships
AUTHOR(S): Chen, Ching-Chow; Chow, Man-Ping; Huang, Wei-Chien; Lin, Yi-Chu; Chang, Ya-Jen
CORPORATE SOURCE: Department of Pharmacology, College of Medicine, National Taiwan University, Taipei, Taiwan
SOURCE: Molecular Pharmacology (2004), 66(3), 683-693
CODEN: MOPMA3; ISSN: 0026-895X
PUBLISHER: American Society for Pharmacology and Experimental Therapeutics
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 09 Sep 2004
AB Intercellular adhesion mol.-1 (ICAM-1) has been implicated in the processes of inflammation and carcinogenesis. Flavonoids, which are polyphenolic compds. with a wide distribution throughout the plant kingdom, have potent anti-inflammatory properties. The authors investigated the effects of flavonols (kaempferol, quercetin, and myricetin) and flavones (flavone, chrysin, apigenin, luteolin, baicalein, and baicalin) on the tumor necrosis factor-α (TNF-α)-stimulated ICAM-1 expression. Among those flavonoids tested, kaempferol, chrysin, apigenin, and luteolin are active inhibitors of ICAM-1 expression. Addnl. expts. suggested that apigenin and luteolin were actively inhibiting the IκB kinase (IKK) activity, the IκBα degradation, the nuclear factor-κB (NF-κB) DNA-protein binding, and the NF-κB luciferase activity. TNF-α-induced ICAM-1 promoter activity was attenuated using an activator protein-1 (AP-1) site deletion mutant, indicating the involvement of AP-1 in ICAM-1 expression. AP-1-specific DNA-protein binding activity was increased by TNF-α, and the supershift assay identified the components of c-fos and c-jun. Extracellular signal-regulated kinase (ERK) and p38 were involved in the c-fos mRNA expression, and c-Jun N-terminal kinase (JNK) was involved in the c-jun mRNA expression. All three mitogen-activated protein kinase (MAPK) activities were inhibited by apigenin and luteolin. In comparison,

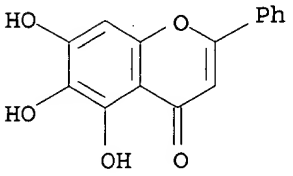
kaempferol and chrysin only inhibited the JNK activity. The inhibitory effects of apigenin and luteolin on ICAM-1 expression are mediated by the sequential attenuation of the three MAPKs activities, the c-fos and c-jun mRNA expressions, and the AP-1 transcriptional activity. IKK/NF-κB pathway is also involved; however, kaempferol- and chrysin-mediated inhibitions are primarily executed through the attenuation of JNK activity, c-jun mRNA expression, and AP-1 activity. The structure-activity relationships are also explored, and the important role of -OH group at positions 5 and 7 of A ring and at position 4 of B ring is noted. Finally, our results suggested that AP-1 seems to play a more significant role than NF-κB in the flavonoid-induced ICAM-1 inhibition.

IT **480-40-0**, Chrysin **491-67-8**, Baicalein **525-82-6**
, Flavone **21967-41-9**, Baicalin
RL: **PAC (Pharmacological activity)**; **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(flavonoids **inhibit** tumor necrosis factor-α-induced up-regulation of intercellular adhesion mol.-1 (ICAM-1) in respiratory epithelial cells through activator protein-1 and **nuclear factor-κ B**)

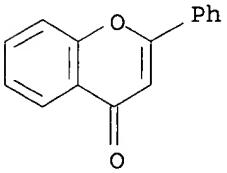
RN 480-40-0 CAPLUS
CN 4H-1-Benzopyran-4-one, 5,7-dihydroxy-2-phenyl- (9CI) (CA INDEX NAME)



RN 491-67-8 CAPLUS
CN 4H-1-Benzopyran-4-one, 5,6,7-trihydroxy-2-phenyl- (9CI) (CA INDEX NAME)

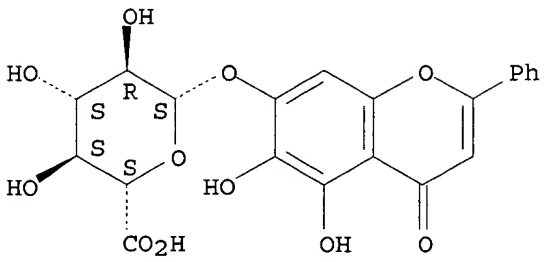


RN 525-82-6 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-phenyl- (9CI) (CA INDEX NAME)



RN 21967-41-9 CAPLUS
CN β-D-Glucopyranosiduronic acid, 5,6-dihydroxy-4-oxo-2-phenyl-4H-1-benzopyran-7-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



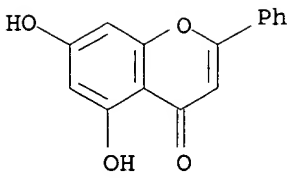
REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 8 OF 36 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:470431 CAPLUS
DOCUMENT NUMBER: 141:22660
TITLE: Propolis compositions containing quercetin, p-coumaric acid, and artepillin C
INVENTOR(S): Yoshizumi, Kazuma; Nishioka, Nobuo
PATENT ASSIGNEE(S): Fancl Corporation, Japan; Morikawa Kenkodo K. K.
SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

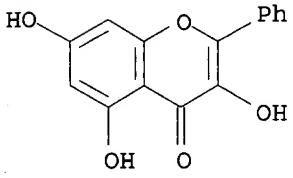
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004159563	A2	20040610	JP 2002-329284	20021113
PRIORITY APPLN. INFO.:			JP 2002-329284	20021113

ED Entered STN: 10 Jun 2004
AB Propolis compns., which show enhanced bioactivity, contain quercetin, p-coumaric acid, artepillin C (I), and further chrysin (II), galangin (III), or phenethyl caffeate (IV). Chinese propolis contained no I and Brazilian propolis contained I but neither II , III, nor IV. Both propolis products are mixed to complement their bioactivities. COX-2 inhibitory activity of a propolis composition varied according to mixing ratio of both products.
IT **329900-75-6, Cyclooxygenase 2**
RL: BSU (Biological study, unclassified); BIOL (Biological study) (**inhibitor**; propolis compns. containing quercetin, p-coumaric acid, artepillin C, and further chrysin, galangin, or phenethyl caffeate)
RN 329900-75-6 CAPLUS
CN Synthetase, prostaglandin endoperoxide, 2 (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IT **480-40-0**, Chrysin **548-83-4**, Galangin
RL: BSU (Biological study, unclassified); FFD (Food or feed use); **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses) (propolis compns. containing quercetin, p-coumaric acid, artepillin C, and further chrysin, galangin, or phenethyl caffeate)
RN 480-40-0 CAPLUS
CN 4H-1-Benzopyran-4-one, 5,7-dihydroxy-2-phenyl- (9CI) (CA INDEX NAME)



RN 548-83-4 CAPLUS
CN 4H-1-Benzopyran-4-one, 3,5,7-trihydroxy-2-phenyl- (9CI) (CA INDEX NAME)

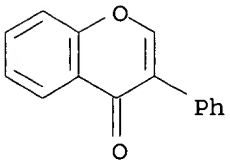


L30 ANSWER 9 OF 36 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:467984 CAPLUS
DOCUMENT NUMBER: 141:22217
TITLE: Therapy of non-malignant diseases or disorders with anti-ErbB2 antibodies
INVENTOR(S): Sliwkowski, Mark X.; Brunetta, Paul G.
PATENT ASSIGNEE(S): Genentech, Inc., USA
SOURCE: PCT Int. Appl., 74 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004048525	A2	20040610	WO 2003-US37367	20031121
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2004258685	A1	20041223	US 2003-719310	20031121
PRIORITY APPLN. INFO.:			US 2002-428027P P	20021121

ED Entered STN: 10 Jun 2004
AB The authors disclose the preparation and biol. activity of murine and humanized antibodies to HER2. In one example, an anti-HER2 antibody is shown to inhibit heregulin-induced activation of Akt kinase and erbB2 association with erbB3. The present application describes treatment of non-malignant indications, such as psoriasis, endometriosis, scleroderma, vascular diseases or disorders, respiratory disease, colon polyps or fibroadenoma, with anti-ErbB2 antibodies (e.g. rhuMAb 2C4).
IT **574-12-9**, Isoflavone
RL: **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)

(adjunct therapy with antibodies to ErbB2)
RN 574-12-9 CAPLUS
CN 4H-1-Benzopyran-4-one, 3-phenyl- (9CI) (CA INDEX NAME)



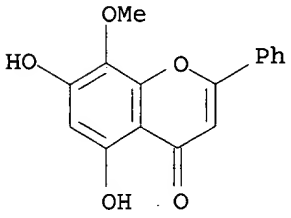
IT **329900-75-6, COX-2**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**inhibitors**; adjunct therapy with antibodies to ErbB2)
RN 329900-75-6 CAPLUS
CN Synthetase, prostaglandin endoperoxide, 2 (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L30 ANSWER 10 OF 36 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:448190 CAPLUS
DOCUMENT NUMBER: 140:417568
TITLE: Inhibition of contact dermatitis in animal models and suppression of proinflammatory gene expression by topically applied flavonoid, wogonin
AUTHOR(S): Lim, Hyun; Park, Haeil; Kim, Hyun Pyo
CORPORATE SOURCE: College of Pharmacy, Kangwon National University, Chunchon, 200-701, S. Korea
SOURCE: Archives of Pharmacal Research (2004), 27(4), 442-448
CODEN: APHRDQ; ISSN: 0253-6269
PUBLISHER: Pharmaceutical Society of Korea
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 03 Jun 2004
AB Wogonin (5,7-dihydroxy-8-methoxyflavone) is a down-regulator of cyclooxygenase-2 and inducible nitric oxide synthase expression, contributing to anti-inflammatory activity in vivo. For further characterization of modulatory activity on proinflammatory gene expression in vivo, the effect of wogonin was examined in this experiment using animal models of skin inflammation. By topical application, wogonin inhibited an edematic response as well as proinflammatory gene expression against contact dermatitis in mice. Wogonin inhibited ear edema (19.4-22.6%) at doses of 50-200 μg/ear and down-regulated interleukin-1β induction (23.1%) at 200 μg/ear in phenol-induced simple irritation. Wogonin (2+50-2+200 μg/ear) also inhibited edematic response (51.2-43.9%) and down-regulated proinflammatory gene expression of cyclooxygenase-2, interleukin-1β, interferon-γ, intercellular adhesion mol.-1 and inducible nitric oxide synthase with some different sensitivity against picryl chloride-induced delayed hypersensitivity reaction. All these results clearly demonstrate that wogonin is a down-regulator of proinflammatory gene expression in animal models of skin inflammation. Therefore, wogonin may have potential for a new anti-inflammatory agent against skin inflammation.
IT **329900-75-6, Cyclooxygenase-2**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(**inhibition** of contact dermatitis in animal models and suppression of proinflammatory gene expression by topically applied flavonoid, wogonin)

RN 329900-75-6 CAPLUS
CN Synthetase, prostaglandin endoperoxide, 2 (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IT **632-85-9**, Wogonin
RL: NPO (Natural product occurrence); **PAC (Pharmacological activity)**; **THU (Therapeutic use)**; BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(inhibition of contact dermatitis in animal models and suppression of proinflammatory gene expression by topically applied flavonoid, wogonin)
RN 632-85-9 CAPLUS
CN 4H-1-Benzopyran-4-one, 5,7-dihydroxy-8-methoxy-2-phenyl- (9CI) (CA INDEX NAME)

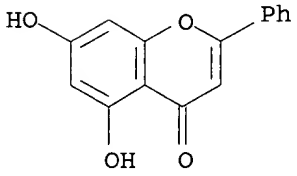


REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

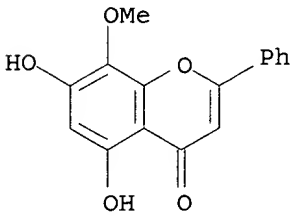
L30 ANSWER 11 OF 36 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:294563 CAPLUS
DOCUMENT NUMBER: 140:350059
TITLE: Synthesis and biological activities of 8-arylflavones
AUTHOR(S): Dao, Tran Thanh; Kim, Soo Bae; Sin, Kwan-Seog; Kim, Sanghee; Kim, Hyun Pyo; Park, Haeil
CORPORATE SOURCE: College of Pharmacy, Kangwon National University, Chuncheon, 200-701, S. Korea
SOURCE: Archives of Pharmacal Research (2004), 27(3), 278-282
CODEN: APHRDQ; ISSN: 0253-6269
PUBLISHER: Pharmaceutical Society of Korea
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 12 Apr 2004
AB A number of 8-arylflavones have been synthesized as congeners of wogonin and evaluated for their inhibitory activities of PGE2 production 8-Arylflavones were obtained from com. available chrysin via two different synthetic pathways. Most 8-arylflavones exhibited much reduced inhibitory activities against COX-2 catalyzed PGE2 production compared to that of wogonin. Functional group replacement at the 8-position of wogonin from methoxy to aryl group caused loss of inhibitory activity. Our present results imply that the functional group at the 8-position of flavones seems to play very important roles for bioactivity.
IT **329900-75-6**, **Cyclooxygenase 2**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(synthesis and PGE2 production-**inhibiting** activities of 8-arylflavones)
RN 329900-75-6 CAPLUS
CN Synthetase, prostaglandin endoperoxide, 2 (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

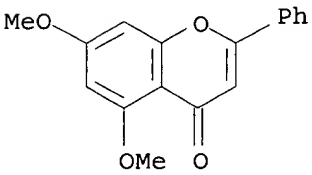
IT **480-40-0**, Chrysin
RL: **PAC (Pharmacological activity)**; RCT (Reactant); **THU (Therapeutic use)**; BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
(synthesis and PGE2 production-inhibiting activities of 8-arylflavones)
RN 480-40-0 CAPLUS
CN 4H-1-Benzopyran-4-one, 5,7-dihydroxy-2-phenyl- (9CI) (CA INDEX NAME)



IT **632-85-9**, Wogonin
RL: **PAC (Pharmacological activity)**; **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(synthesis and PGE2 production-inhibiting activities of 8-arylflavones)
RN 632-85-9 CAPLUS
CN 4H-1-Benzopyran-4-one, 5,7-dihydroxy-8-methoxy-2-phenyl- (9CI) (CA INDEX NAME)



IT **21392-57-4P**, 5,7-Dimethoxyflavone
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis and PGE2 production-inhibiting activities of 8-arylflavones)
RN 21392-57-4 CAPLUS
CN 4H-1-Benzopyran-4-one, 5,7-dimethoxy-2-phenyl- (9CI) (CA INDEX NAME)

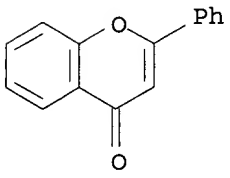


REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

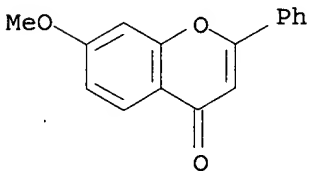
L30 ANSWER 12 OF 36 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:153573 CAPLUS
DOCUMENT NUMBER: 140:357081
TITLE: Synthesis and **inhibitory** activity against **COX-2** catalyzed prostaglandin

production of chrysin derivatives
AUTHOR(S): Dao, Tran Thanh; Chi, Yeon Sook; Kim, Jeongsoo; Kim, Hyun Pyo; Kim, Sanghee; Park, Haeil
CORPORATE SOURCE: College of Pharmacy, Kangwon National University, Chunchon, 200-701, S. Korea
SOURCE: Bioorganic & Medicinal Chemistry Letters (2004), 14(5), 1165-1167
CODEN: BMCLE8; ISSN: 0960-894X
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 26 Feb 2004
AB A series of chrysin derivs. were prepared and evaluated for their inhibitory activities of cyclooxygenase-2 catalyzed prostaglandin production Chrysin derivs. were prepared from 2-hydroxyacetophenone, 2,4-dihydroxyacetophenone and 2,6-dihydroxyacetophenone in 2 to 4 steps, resp. Methoxylated chrysin derivs. were converted to the corresponding hydroxylated chrysin derivs. by the reaction with BBr3 in good yields. The inhibitory activity of the chrysin derivs. against prostaglandin production from lipopolysaccharide-treated RAW 264.7 cells was measured. Chrysin derivs. with 3',4'-dichloro substituents exhibited good inhibitory activity of prostaglandin production
IT **329900-75-6, COX-2**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(**COX-2**; preparation of chrysin derivs. from acetophenones and their **inhibitory** activity against **COX-2** catalyzed prostaglandin production)
RN 329900-75-6 CAPLUS
CN Synthetase, prostaglandin endoperoxide, 2 (9CI) (CA INDEX NAME)

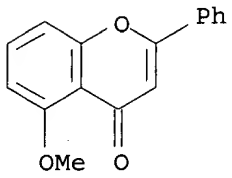
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IT **525-82-6P 22395-22-8P 42079-78-7P**
RL: **PAC (Pharmacological activity)**; RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)
(preparation of chrysin derivs. from acetophenones and their **inhibitory** activity against **COX-2** catalyzed prostaglandin production)
RN 525-82-6 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-phenyl- (9CI) (CA INDEX NAME)



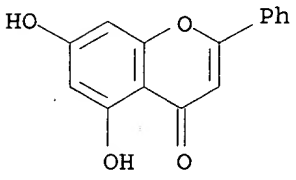
RN 22395-22-8 CAPLUS
CN 4H-1-Benzopyran-4-one, 7-methoxy-2-phenyl- (9CI) (CA INDEX NAME)



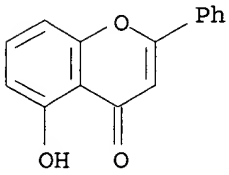
RN 42079-78-7 CAPLUS
CN 4H-1-Benzopyran-4-one, 5-methoxy-2-phenyl- (9CI) (CA INDEX NAME)



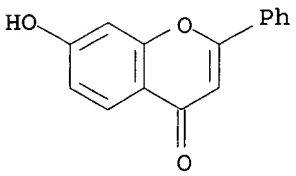
IT **480-40-0DP**, Chrysin, derivs. **491-78-1P**
6665-86-7P
RL: **PAC (Pharmacological activity)**; SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation of chrysin derivs. from acetophenones and their **inhibitory** activity against **COX-2** catalyzed prostaglandin production)
RN 480-40-0 CAPLUS
CN 4H-1-Benzopyran-4-one, 5,7-dihydroxy-2-phenyl- (9CI) (CA INDEX NAME)



RN 491-78-1 CAPLUS
CN 4H-1-Benzopyran-4-one, 5-hydroxy-2-phenyl- (9CI) (CA INDEX NAME)



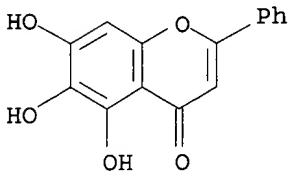
RN 6665-86-7 CAPLUS
CN 4H-1-Benzopyran-4-one, 7-hydroxy-2-phenyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 13 OF 36 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:111557 CAPLUS
DOCUMENT NUMBER: 140:297340
TITLE: Inhibition of inducible nitric oxide synthase expression by baicalein in endotoxin/cytokine-stimulated microglia
AUTHOR(S): Chen, Chun-Jung; Raung, Shue-Ling; Liao, Su-Lan; Chen, Shih-Yun
CORPORATE SOURCE: Department of Education and Research, Taichung Veterans General Hospital, Taichung, 407, Taiwan
SOURCE: Biochemical Pharmacology (2004), 67(5), 957-965
CODEN: BCPCA6; ISSN: 0006-2952
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 11 Feb 2004
AB Excessive production of nitric oxide (NO) in the central nervous system (CNS) mediated by activation of microglia has been implicated in neurotoxicity after stresses such as ischemia. Baicalein, a polyphenolic flavonoid antioxidant, is known to have anti-inflammatory, anticarcinogenic, and neuroprotective effects. In the present study, we report the inhibitory effect of baicalein on endotoxin/cytokine-induced NO production and inducible nitric oxide synthase (iNOS) gene expression in microglia. Baicalein abolished the endotoxin/cytokine-induced expression of iNOS protein, iNOS mRNA, and iNOS promoter activity in a parallel concentration-dependent manner. The suppression of iNOS expression was not mediated through the down-regulation of tumor necrosis factor-alpha (TNF-α) by baicalein because TNF-α failed to enhance endotoxin/cytokine-induced NO production in microglia. From the electrophoretic mobility shift assay (EMSA), we found that baicalein exerted a distinct inhibitory effect on the DNA binding activity of transcription factors, and this was significantly greater in nuclear factor IL-6 (NF-IL6) than in nuclear factor kappa B (NF-κB) and activated protein 1 (AP-1). Although extracellular signal-regulated kinase (ERK) is critical to iNOS expression, endotoxin/cytokine-stimulated phosphorylation of ERK1/2 was not significantly inhibited by baicalein. These results indicate that NF-IL6 inactivation could be the major determinant for the suppression of NO production by baicalein in microglia. Furthermore, it suggests that the inhibitory effect of baicalein on microglia activation and neurotoxic factor production is responsible for its neuroprotective action.
IT **491-67-8**, Baicalein
RL: **PAC (Pharmacological activity)**; **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(inhibition of iNOS expression by baicalein in endotoxin/cytokine-stimulated microglia)
RN 491-67-8 CAPLUS
CN 4H-1-Benzopyran-4-one, 5,6,7-trihydroxy-2-phenyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 14 OF 36 CAPLUS COPYRIGHT 2005 ACS on STN

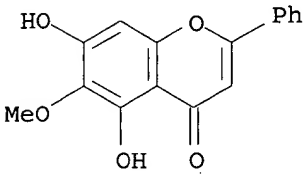
ACCESSION NUMBER: 2003:892548 CAPLUS
DOCUMENT NUMBER: 139:386470
TITLE: Formulation of a mixture of Free-B-ring flavonoids and flavans for treatment of diseases mediated by the COX-2 and 5-LO pathways
INVENTOR(S): Jia, Qi
PATENT ASSIGNEE(S): Unigen Pharmaceuticals, Inc., USA
SOURCE: PCT Int. Appl., 93 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 7
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003092599	A2	20031113	WO 2003-US13463	20030430
WO 2003092599	A3	20040311		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2484192	AA	20031113	CA 2003-2484192	20030430
EP 1503778	A2	20050209	EP 2003-726548	20030430
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				

PRIORITY APPLN. INFO.: US 2002-377168P P 20020430
WO 2003-US13463 W 20030430

OTHER SOURCE(S): MARPAT 139:386470
ED Entered STN: 14 Nov 2003
AB The present invention provides a novel composition of matter comprised of a mixture of two specific classes of compds., Free-B-ring flavonoids and flavans for the prevention and treatment of diseases and conditions mediated by the cyclooxygenase-2 (COX-2) and 5-lipoxygenase (5-LO) pathways, including but not limited to the relief joint discomfort and pain associated with conditions such as osteoarthritis, rheumatoid arthritis, and other injuries that result from overuse. The present invention further provides a novel method for simultaneously inhibiting the cyclooxygenase-2 (COX-2) and 5-lipoxygenase (5-LO) enzymes, and reducing COX-2 mRNA production Finally, the present invention includes a method for weight loss and blood glucose control. The methods of this invention are comprised of administering to a host in need thereof an effective amount of the composition of this invention together with a pharmaceutically acceptable carrier. Examples are given for preparation of organic and aqueous exts. from Acacia and Scutellaria, inhibition of COX-2 peroxidase activity by various plant species, and isolation of flavonoids for Scutellaria exts.
IT **329900-75-6, COX-2**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(**COX-2, inhibitors**; formulation of a mixture of free-B-ring flavonoids and flavans for treatment of diseases mediated by the **COX-2** and 5-LO pathways)
RN 329900-75-6 CAPLUS
CN Synthetase, prostaglandin endoperoxide, 2 (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IT **480-11-5**, Oroxylin A **480-40-0**, Chrysin **491-67-8**
, Baicalein **632-85-9**, Wogonin **4443-09-8**, Norwogonin
21967-41-9, Baicalin **35775-49-6**, Chrysin 7-glucuronide
36948-76-2 51059-44-0, Wogonin 7-glucuronide
123549-16-6
RL: NPO (Natural product occurrence); **THU (Therapeutic use)**;
BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(formulation of a mixture of free-B-ring flavonoids and flavans for
treatment of diseases mediated by the COX-2 and 5-LO pathways)
RN 480-11-5 CAPLUS
CN 4H-1-Benzopyran-4-one, 5,7-dihydroxy-6-methoxy-2-phenyl- (9CI) (CA INDEX NAME)



RN 480-40-0 CAPLUS
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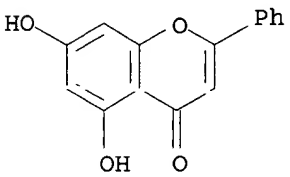
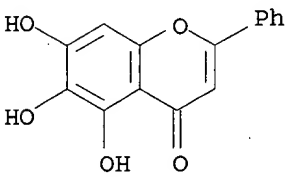
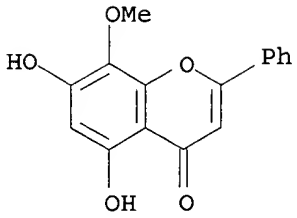


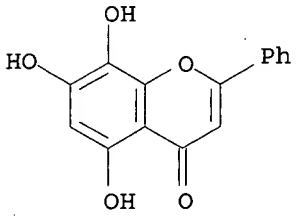
RN 491-67-8 CAPLUS
CN 4H-1-Benzopyran-4-one, 5,6,7-trihydroxy-2-phenyl- (9CI) (CA INDEX NAME)



RN 632-85-9 CAPLUS
CN 4H-1-Benzopyran-4-one, 5,7-dihydroxy-8-methoxy-2-phenyl- (9CI) (CA INDEX NAME)

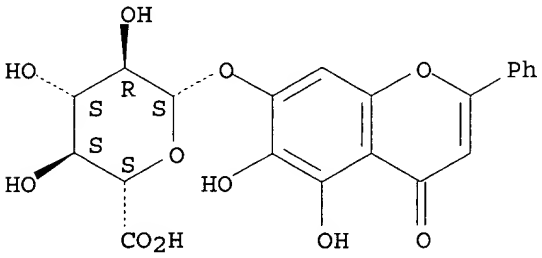


RN 4443-09-8 CAPLUS
CN 4H-1-Benzopyran-4-one, 5,7,8-trihydroxy-2-phenyl- (9CI) (CA INDEX NAME)



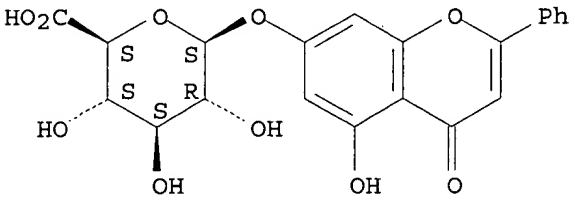
RN 21967-41-9 CAPLUS
CN β-D-Glucopyranosiduronic acid, 5,6-dihydroxy-4-oxo-2-phenyl-4H-1-benzopyran-7-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



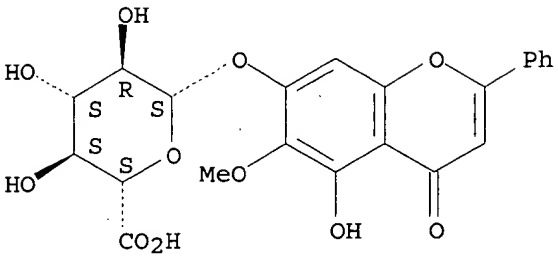
RN 35775-49-6 CAPLUS
CN β-D-Glucopyranosiduronic acid, 5-hydroxy-4-oxo-2-phenyl-4H-1-benzopyran-7-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



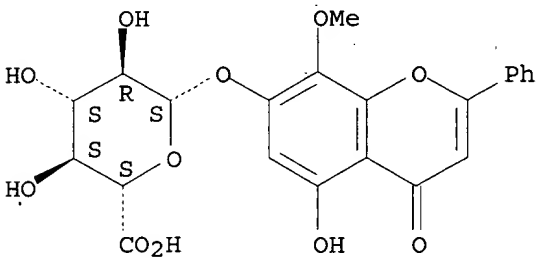
RN 36948-76-2 CAPLUS
CN β-D-Glucopyranosiduronic acid, 5-hydroxy-6-methoxy-4-oxo-2-phenyl-4H-1-benzopyran-7-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



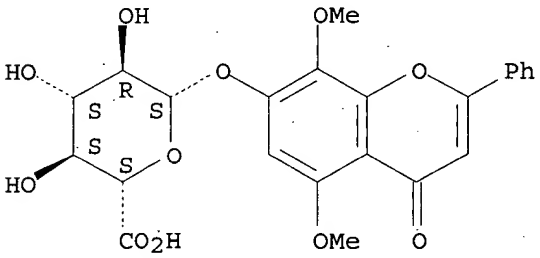
RN 51059-44-0 CAPLUS
CN β-D-Glucopyranosiduronic acid, 5-hydroxy-8-methoxy-4-oxo-2-phenyl-4H-1-benzopyran-7-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 123549-16-6 CAPLUS
CN β-D-Glucopyranosiduronic acid, 5,8-dimethoxy-4-oxo-2-phenyl-4H-1-benzopyran-7-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



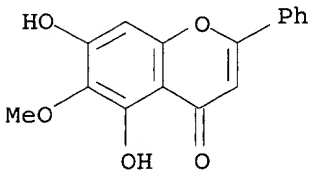
L30 ANSWER 15 OF 36 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:830828 CAPLUS
DOCUMENT NUMBER: 140:156920
TITLE: Biological activities of flavonoids isolated from Chinese herb Huang Qui: Inhibition of NO and PGE2 production by flavonoids
AUTHOR(S): Chen, Yen-Chou; Shen, Shing-Chuan; Hsu, Foun-Lin
CORPORATE SOURCE: Graduate Institute of Pharmacognosy Science, School of Pharmacy, Taipei Medical University, Taipei, Taiwan
SOURCE: ACS Symposium Series (2003), 859(Oriental Foods and Herbs), 113-120

CODEN: ACSMC8; ISSN: 0097-6156
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 23 Oct 2003

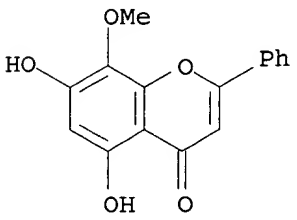
AB Huang Qui is one of the popular Chinese herbs, and was used in treatment of several human diseases such as inflammation, allergy and artherosclosis for thousands of years. However the active components of Huang Qui are still undefined. The authors' recent studies demonstrated that flavonoids in Huang Qui including wogonin, quercetin, and oroxylin A showed the significant inhibition on lipopolysaccharide (LPS)-induced nitric oxide (NO) and prostaglandin E2 (PGE2) production, accompanied by inhibiting inducible nitric oxide synthase (iNOS) and cyclooxygenase 2 (COX-2) gene expression. The inhibitory mechanism of these compds. on LPS-induced responses was through inhibiting NF-κB activation. In vivo study showed that wogonin and quercetin were able to suppress LPS-induced NO production in the serum of Balb/c mice. In addition to NO inhibition, wogonin showed the apoptotic effect on human promyeloleukemia cells HL-60 and hepatocellular carcinoma cells SK-HEP-1 cells through activation of caspase 3-dependent cascade, and oroxylin A exhibited the significant relaxative effect in porcine cerebral arteries pre-constricted by U-46619 through activation of potassium channels. Results of the authors' studies demonstrate that wogonin, quercetin, and oroxylin A are active components of Huang Qui and deserve several beneficial biol. activities to be explored further.

IT **480-11-5**, Oroxylin A **632-85-9**, Wogonin
RL: **PAC (Pharmacological activity)**; **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(inhibition of NO and PGE2 production by flavonoids isolated from Chinese herb Huang Qui)

RN 480-11-5 CAPLUS
CN 4H-1-Benzopyran-4-one, 5,7-dihydroxy-6-methoxy-2-phenyl- (9CI) (CA INDEX NAME)



RN 632-85-9 CAPLUS
CN 4H-1-Benzopyran-4-one, 5,7-dihydroxy-8-methoxy-2-phenyl- (9CI) (CA INDEX NAME)



IT **329900-75-6**, **Cyclooxygenase 2**
RL: BSU (Biological study, unclassified); BIOL (Biological study)

(**inhibition**; biol. activity of flavonoids isolated from Chinese herb Huang Qui)
RN 329900-75-6 CAPLUS
CN Synthetase, prostaglandin endoperoxide, 2 (9CI) (CA INDEX NAME)

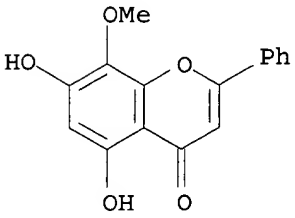
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 16 OF 36 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:826157 CAPLUS
DOCUMENT NUMBER: 140:23032
TITLE: Flavonoid wogonin from medicinal herb is neuroprotective by inhibiting inflammatory activation of microglia
AUTHOR(S): Lee, Heasuk; Kim, Young Ok; Kim, Hocheol; Kim, Sun Yeou; Noh, Hae Sook; Kang, Sang Soo; Cho, Gyeong Jae; Choi, Wan Sung; Suk, Kyoungho
CORPORATE SOURCE: Dep. of Anat. and Neurobiol., Res. Inst. of Nat. Sci., and Inst. of Health Sci., Gyeongsang Natl. Univ. Coll. of Med., Jinju, 660-751, S. Korea
SOURCE: FASEB Journal (2003), 17(13), 1943-1944, 10.1096/fj.03-0057fje
CODEN: FAJOEC; ISSN: 0892-6638
PUBLISHER: Federation of American Societies for Experimental Biology
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 22 Oct 2003
AB Wogonin (5,7-dihydroxy-8-methoxyflavone), a flavonoid originated from the root of a medicinal herb Scutellaria baicalensis Georgi, has been previously shown to have anti-inflammatory activities in various cell types including macrophages. In this work, we have found that wogonin is a potent neuroprotector from natural source. Wogonin inhibited inflammatory activation of cultured brain microglia by diminishing lipopolysaccharide-induced tumor necrosis factor-α (TNF-α), interleukin-1β, and nitric oxide (NO) production Wogonin inhibited NO production by suppressing inducible NO synthase (iNOS) induction and NF-κB activation in microglia. Inhibition of inflammatory activation of microglia by wogonin led to the reduction in microglial cytotoxicity toward cocultured PC12 cells, supporting a neuroprotective role for wogonin in vitro. The neuroprotective effect of wogonin was further demonstrated in vivo using two exptl. brain injury models; transient global ischemia by four-vessel occlusion and excitotoxic injury by systemic kainate injection. In both animal models, wogonin conferred neuroprotection by attenuating the death of hippocampal neurons, and the neuroprotective effect was associated with inhibition of the inflammatory activation of microglia. Hippocampal induction of inflammatory mediators such as iNOS and TNF-α was reduced by wogonin in the global ischemia model, and microglial activation was markedly down-regulated by wogonin in the kainate injection model as judged by microglia-specific isolectin B4 staining. Taken together, our results indicate that wogonin exerts its neuroprotective effect by inhibiting microglial activation, which is a critical component of pathogenic inflammatory responses in neurodegenerative diseases. The current study emphasizes the importance of medicinal herbs and their constituents as an invaluable source for the development of novel neuroprotective drugs.
IT **632-85-9**, Wogonin
RL: **PAC (Pharmacological activity)**; **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)

(flavonoid wogonin from medicinal herb is neuroprotective by inhibiting inflammatory activation of microglia)

RN 632-85-9 CAPLUS

CN 4H-1-Benzopyran-4-one, 5,7-dihydroxy-8-methoxy-2-phenyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 17 OF 36 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:816980 CAPLUS

DOCUMENT NUMBER: 140:174727

TITLE: Involvement of **nuclear factor**-. **kappa.b** in the **inhibition** of interleukin-12 production from mouse macrophages by baicalein, a flavonoid in Scutellaria baicalensis

AUTHOR(S): Kang, Bok Yun; Chung, Su Wol; Kim, Seung Hyun; Cho, Daeho; Kim, Tae Sung

CORPORATE SOURCE: College of Pharmacy and Research Institute of Drug Development, Chonnam National University, Kwangju, S. Korea

SOURCE: Planta Medica (2003), 69(8), 687-691
CODEN: PLMEAA; ISSN: 0032-0943

PUBLISHER: Georg Thieme Verlag

DOCUMENT TYPE: Journal

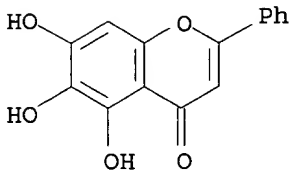
LANGUAGE: English

ED Entered STN: 17 Oct 2003

AB Pharmacol. inhibition of interleukin-12 (IL-12) production may be a therapeutic strategy for preventing development and progression of disease in exptl. models of autoimmunity. In this study we investigated the effects of baicalein, a flavonoid present in the root of Scutellaria baicalensis, on the production of IL-12 from mouse macrophages stimulated with lipopolysaccharide (LPS). Baicalein potently inhibited the LPS-induced IL-12 production from both primary macrophages and RAW264.7 monocytic cell line in a dose-dependent manner (the IC50 values were 43.7 and 17.4 μM, resp.). The effect of baicalein on IL-12 gene promoter activation was analyzed by transfecting RAW264.7 cells with IL-12 gene promoter/luciferase constructs. The repressive effect mapped to a region in the IL-12 gene promoter containing a binding site for NF-κB. Furthermore, activation of macrophages by LPS resulted in markedly enhanced binding activity to the NF-κB site, which significantly decreased upon addition of baicalein, indicating that baicalein inhibited IL-12 production in LPS-activated macrophages via inhibition of NF-κB binding activity.

IT **491-67-8**, Baicalein
RL: **DMA (Drug mechanism of action)**; **PAC (Pharmacological activity)**; **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(**NF**-κ **B** role in baicalein-induced

inhibition of IL-12 in LPS-activated macrophages)
RN 491-67-8 CAPLUS
CN 4H-1-Benzopyran-4-one, 5,6,7-trihydroxy-2-phenyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 18 OF 36 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:696316 CAPLUS
DOCUMENT NUMBER: 139:191432
TITLE: Identification of free-B-ring flavonoids as potent **cyclooxygenase 2 (COX-2) inhibitors**
INVENTOR(S): Jia, Qi; Nichols, Timothy C.; Rhoden, Eric E.; Waite, Scott
PATENT ASSIGNEE(S): Unigen Pharmaceuticals, Inc., USA
SOURCE: U.S. Pat. Appl. Publ., 23 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 7
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003165588	A1	20030904	US 2002-91362	20020301
WO 2003074065	A1	20030912	WO 2003-US6098	20030228
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1487470	A1	20041222	EP 2003-743716	20030228
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2005519100	T2	20050630	JP 2003-572581	20030228
US 2004092458	A1	20040513	US 2003-469275	20030827
US 2005096281	A1	20050505	US 2004-932571	20040901

PRIORITY APPLN. INFO.:		
US 2002-91362	A	20020301
US 2002-104477	A2	20020322
WO 2003-US6098	W	20030228
US 2003-427746	A2	20030430
US 2003-499742P	P	20030902

OTHER SOURCE(S): MARPAT 139:191432
ED Entered STN: 05 Sep 2003
AB The invention provides a method for inhibiting COX-2. The method

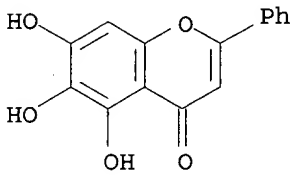
comprises administering a composition containing a free-B-ring flavonoid or a composition containing a mixture of free-B-ring flavonoids to a host in need thereof.

The invention also includes methods for the prevention and treatment of COX-2-mediated diseases and conditions. The method for preventing and treating COX-2-mediated diseases and conditions comprises administering to a host in need thereof an effective amount of a composition containing a free-B-ring flavonoid or a composition containing a mixture of free-B-ring flavonoids and a pharmaceutically acceptable carrier.

IT **329900-75-6**, **Cyclooxygenase 2**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(free-B-ring flavonoids as **cyclooxygenase 2 inhibitors**)
RN 329900-75-6 CAPLUS
CN Synthetase, prostaglandin endoperoxide, 2 (9CI) (CA INDEX NAME)

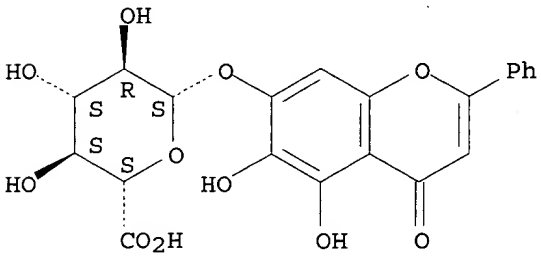
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT **491-67-8**, Baicalein **21967-41-9**, Baicalin
RL: NPO (Natural product occurrence); **PAC (Pharmacological activity)**; **THU (Therapeutic use)**; BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(free-B-ring flavonoids as **cyclooxygenase 2 inhibitors**)
RN 491-67-8 CAPLUS
CN 4H-1-Benzopyran-4-one, 5,6,7-trihydroxy-2-phenyl- (9CI) (CA INDEX NAME)



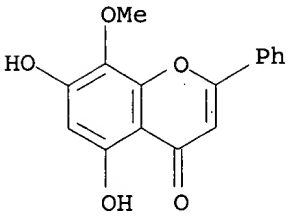
RN 21967-41-9 CAPLUS
CN β-D-Glucopyranosiduronic acid, 5,6-dihydroxy-4-oxo-2-phenyl-4H-1-benzopyran-7-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.

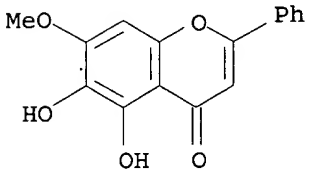


IT **632-85-9**, Wogonin **29550-13-8**, 5,6-Dihydroxy-7-methoxyflavone **38183-03-8**, 7,8-Dihydroxyflavone
RL: **PAC (Pharmacological activity)**; **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(free-B-ring flavonoids as **cyclooxygenase 2 inhibitors**)
RN 632-85-9 CAPLUS

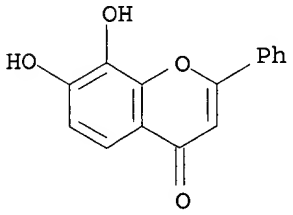
CN 4H-1-Benzopyran-4-one, 5,7-dihydroxy-8-methoxy-2-phenyl- (9CI) (CA INDEX NAME)



RN 29550-13-8 CAPLUS
CN 4H-1-Benzopyran-4-one, 5,6-dihydroxy-7-methoxy-2-phenyl- (9CI) (CA INDEX NAME)



RN 38183-03-8 CAPLUS
CN 4H-1-Benzopyran-4-one, 7,8-dihydroxy-2-phenyl- (9CI) (CA INDEX NAME)



L30 ANSWER 19 OF 36 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:690440 CAPLUS
DOCUMENT NUMBER: 140:246066
TITLE: SAR: flavonoids and **COX-2 inhibition**
AUTHOR(S): Rosenkranz, Herbert S.; Thampatty, Bhavani P.
CORPORATE SOURCE: Department of Biomedical Sciences, Florida Atlantic University, Boca Raton, FL, 33431-0991, USA
SOURCE: Oncology Research (2003), Volume Date 2002, 13(12), 529-535
CODEN: ONREE8; ISSN: 0965-0407
PUBLISHER: Cognizant Communication Corp.
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 04 Sep 2003
AB An anal. based upon structure-activity relationships (SAR) of the COX-2-inhibiting properties of flavonoids, a group of potential cancer

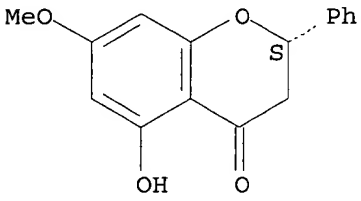
chemopreventive agents, reveals that there is a dual structural basis for these activities. Each of these structural determinants (pharmacophores) alone is sufficient for activity. One of the pharmacophores is a 2D 6.9 Å distance descriptor that spans the A and C rings and includes the 4-oxo and 7-hydroxyl moieties. The potency associated with that pharmacophore is determined by a series of structural modulators that can increase, decrease, or even abolish the COX-2-inhibiting potential associated with that pharmacophore. The second pharmacophore describes a para-substituted phenolic B ring that requires unsubstituted meta and ortho positions. Based upon this, it indicates that hydroxylation at the 4'-position and a free 5'-position are sufficient for COX-2-inhibiting activity. The potency associated with this pharmacophore is modulated by log P2 and by the mol. weight

IT **329900-75-6**, **Cyclooxygenase-2**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(structure-activity relationship of flavonoids as **COX-2 inhibitors**)
RN 329900-75-6 CAPLUS
CN Synthetase, prostaglandin endoperoxide, 2 (9CI) (CA INDEX NAME)

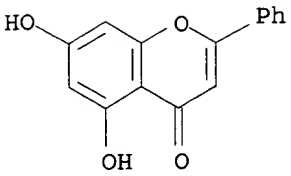
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT **480-37-5**, Pinostrobin **480-40-0**, Chrysin **487-26-3**, Flavanone **491-78-1**, 5-Hydroxyflavone **520-28-5**, 5-Hydroxy-7-methoxyflavone **525-82-6**, Flavone **548-83-4**, 3,5,7-Trihydroxyflavone **574-12-9**, Isoflavone **577-85-5**, 3-Hydroxyflavone **3034-04-6**, 6-Methoxyflavanone **4250-77-5**, 6-Hydroxyflavanone **6665-83-4**, 6-Hydroxyflavone **6665-86-7**, 7-Hydroxyflavone **17348-76-4** **19725-47-4**, 2'-Methoxyflavone **38183-03-8**, 7,8-Dihydroxyflavone **42079-78-7**, 5-Methoxyflavone **55947-36-9**, 5-Methoxyflavanone **71592-46-6**, 3',6-Dihydroxyflavone **93176-00-2**, 6-Methoxyflavonol **108238-40-0**, 3',7-Dihydroxyflavone
RL: **PAC (Pharmacological activity)**; PRP (Properties); **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(structure-activity relationship of flavonoids as **COX-2 inhibitors**)
RN 480-37-5 CAPLUS
CN 4H-1-Benzopyran-4-one, 2,3-dihydro-5-hydroxy-7-methoxy-2-phenyl-, (2S)- (9CI) (CA INDEX NAME)

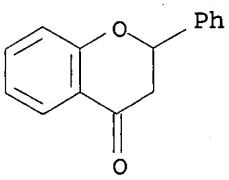
Absolute stereochemistry. Rotation (-).



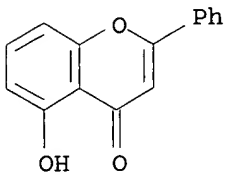
RN 480-40-0 CAPLUS
CN 4H-1-Benzopyran-4-one, 5,7-dihydroxy-2-phenyl- (9CI) (CA INDEX NAME)



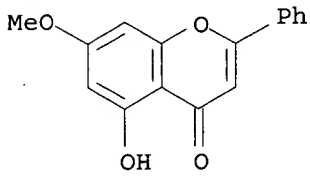
RN 487-26-3 CAPLUS
CN 4H-1-Benzopyran-4-one, 2,3-dihydro-2-phenyl- (9CI) (CA INDEX NAME)



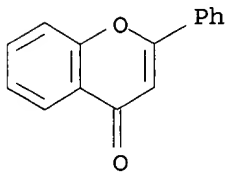
RN 491-78-1 CAPLUS
CN 4H-1-Benzopyran-4-one, 5-hydroxy-2-phenyl- (9CI) (CA INDEX NAME)



RN 520-28-5 CAPLUS
CN 4H-1-Benzopyran-4-one, 5-hydroxy-7-methoxy-2-phenyl- (9CI) (CA INDEX NAME)

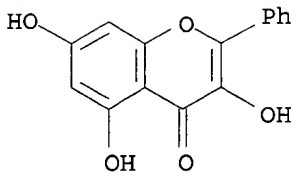


RN 525-82-6 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-phenyl- (9CI) (CA INDEX NAME)

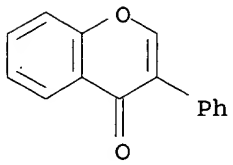


RN 548-83-4 CAPLUS
CN 4H-1-Benzopyran-4-one, 3,5,7-trihydroxy-2-phenyl- (9CI) (CA INDEX NAME)

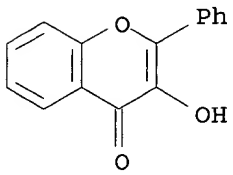
Searched by Barb O'Bryen, STIC 2-2518



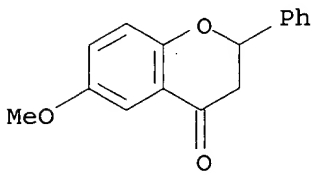
RN 574-12-9 CAPLUS
CN 4H-1-Benzopyran-4-one, 3-phenyl- (9CI) (CA INDEX NAME)



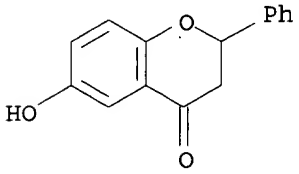
RN 577-85-5 CAPLUS
CN 4H-1-Benzopyran-4-one, 3-hydroxy-2-phenyl- (9CI) (CA INDEX NAME)



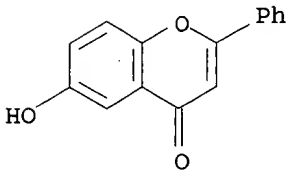
RN 3034-04-6 CAPLUS
CN 4H-1-Benzopyran-4-one, 2,3-dihydro-6-methoxy-2-phenyl- (9CI) (CA INDEX NAME)



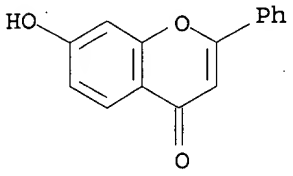
RN 4250-77-5 CAPLUS
CN 4H-1-Benzopyran-4-one, 2,3-dihydro-6-hydroxy-2-phenyl- (9CI) (CA INDEX NAME)



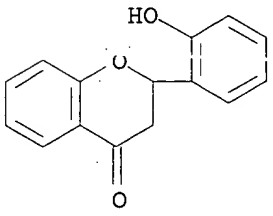
RN 6665-83-4 CAPLUS
CN 4H-1-Benzopyran-4-one, 6-hydroxy-2-phenyl- (9CI) (CA INDEX NAME)



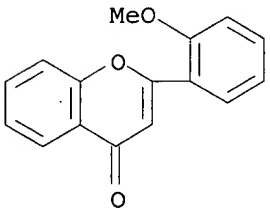
RN 6665-86-7 CAPLUS
CN 4H-1-Benzopyran-4-one, 7-hydroxy-2-phenyl- (9CI) (CA INDEX NAME)



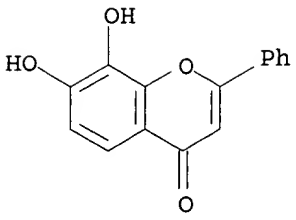
RN 17348-76-4 CAPLUS
CN 4H-1-Benzopyran-4-one, 2,3-dihydro-2-(2-hydroxyphenyl)- (9CI) (CA INDEX NAME)



RN 19725-47-4 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-(2-methoxyphenyl)- (9CI) (CA INDEX NAME)



RN 38183-03-8 CAPLUS
CN 4H-1-Benzopyran-4-one, 7,8-dihydroxy-2-phenyl- (9CI) (CA INDEX NAME)



RN 42079-78-7 CAPLUS
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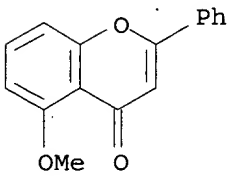
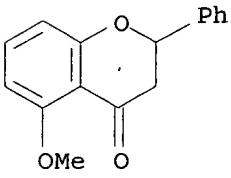
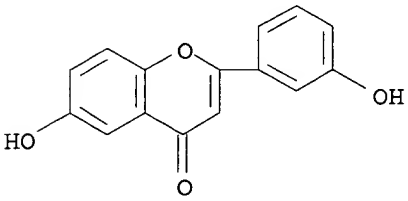


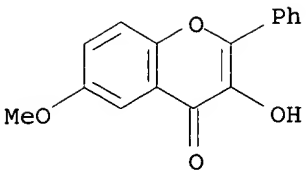
RN 55947-36-9 CAPLUS
CN 4H-1-Benzopyran-4-one, 2,3-dihydro-5-methoxy-2-phenyl- (9CI) (CA INDEX NAME)



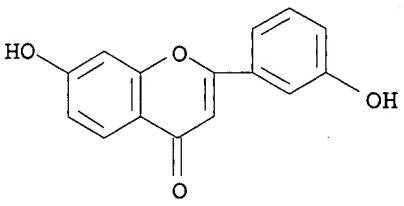
RN 71592-46-6 CAPLUS
CN 4H-1-Benzopyran-4-one, 6-hydroxy-2-(3-hydroxyphenyl)- (9CI) (CA INDEX NAME)



RN 93176-00-2 CAPLUS
CN 4H-1-Benzopyran-4-one, 3-hydroxy-6-methoxy-2-phenyl- (9CI) (CA INDEX NAME)



RN 108238-40-0 CAPLUS
CN 4H-1-Benzopyran-4-one, 7-hydroxy-2-(3-hydroxyphenyl)- (9CI) (CA INDEX NAME)



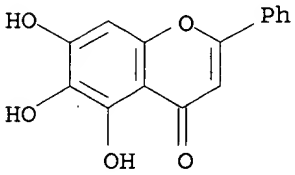
REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 20 OF 36 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:598189 CAPLUS
DOCUMENT NUMBER: 140:70453
TITLE: Pharmacological evaluation of several major ingredients of Chinese herbal medicines in human hepatoma Hep3B cells
AUTHOR(S): Chou, C. C.; Pan, S. L.; Teng, C. M.; Guh, J. H.
CORPORATE SOURCE: College of Medicine, Pharmacological Institute, National Taiwan University, Taipei, Taiwan
SOURCE: European Journal of Pharmaceutical Sciences (2003), 19(5), 403-412
CODEN: EPSCED; ISSN: 0928-0987
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 05 Aug 2003
AB Long-dan-tan (Chinese name) is one of the most common herbal medicines used by Chinese people with chronic liver disease. Accumulated anecdotal evidence suggests that Long-dan-tan may show a beneficial effect in patients with hepatocellular carcinoma. Long-dan-tan is made from five plants: Gentiana root, Scutellaria root, Gardenia fruit, Alisma rhizome, and Bupleurum root. In this study, we have examined the cytotoxic effects of the five major ingredients isolated from the above plants, i.e. gentiopicroside, baicalein, geniposide, alisol B acetate and saikosaponin-d, resp., on human hepatoma Hep3B cells. Annexin V immunofluorescence detection, DNA fragmentation assays and FACScan anal. of propidium iodide-staining cells showed that gentiopicroside, baicalein, and geniposide had little effect, whereas alisol B acetate and saikosaponin-d profoundly induced apoptosis in Hep3B cells. Alisol B acetate, but not saikosaponin-d, induced G2/M arrest of the cell cycle as well as a significant increase in caspase-3 activity. Interestingly, baicalein by itself induced an increase in H_2O_2 generation and the subsequent NF-κB activation; furthermore, it effectively inhibited the transforming growth factor-β1 (TGF-β1)-induced caspase-3

activation and cell apoptosis. We suggest that alisol B acetate and saikosaponin-d induced cell apoptosis through the caspase-3-dependent and -independent pathways, resp. Instead of inducing apoptosis, baicalein inhibits TGF-β1-induced apoptosis via increase in cellular H2O2 formation and NF-κB activation in human hepatoma Hep3B cells.

IT **491-67-8**, Baicalein
RL: **DMA (Drug mechanism of action)**; NPO (Natural product occurrence); **PAC (Pharmacological activity)**; **THU (Therapeutic use)**; BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(pharmacol. evaluation of several major ingredients of Chinese herbal medicines Long-dan-tan in human hepatoma Hep3B cells)

RN 491-67-8 CAPLUS
CN 4H-1-Benzopyran-4-one, 5,6,7-trihydroxy-2-phenyl- (9CI) (CA INDEX NAME)



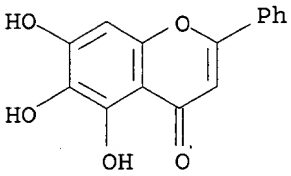
REFERENCE COUNT: 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 21 OF 36 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:557093 CAPLUS
DOCUMENT NUMBER: 139:390885
TITLE: Inhibition of Cancer Cell Proliferation and Prostaglandin E2 Synthesis by Scutellaria Baicalensis
AUTHOR(S): Zhang, David Y.; Wu, Josephine; Ye, Fei; Xue, Li; Jiang, Shiquan; Yi, Jizu; Zhang, Wandi; Wei, Huachen; Sung, Max; Wang, Wayne; Li, Xiaoping
CORPORATE SOURCE: Department of Pathology, Mount Sinai School of Medicine, New York, NY, 10029, USA
SOURCE: Cancer Research (2003), 63(14), 4037-4043
CODEN: CNREA8; ISSN: 0008-5472
PUBLISHER: American Association for Cancer Research
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 21 Jul 2003
AB Scutellaria baicalensis is a widely used Chinese herbal medicine that has been used historically in anti-inflammatory and anticancer therapy. The purpose of this study is to verify its anticancer activity on head and neck squamous cell carcinoma (HNSCC) in vitro and in vivo and to investigate its effect on cyclooxygenase-2 (COX-2), which converts arachidonic acid to prostaglandin E2 (PGE2) and is highly expressed in HNSCC. Two human HNSCC cell lines (SCC-25 and KB) and a nontumorigenic cell line (HaCaT) were tested in vitro for growth inhibition, proliferation cell nuclear antigen expression, and COX-2 activity and expression after treatment with Scutellaria baicalensis extract Its effects were compared with those of baicalein (a flavonoid isolated from Scutellaria baicalensis), indomethacin (a nonselective COX inhibitor), and celecoxib (a selective COX-2 inhibitor). Four nude mice with s.c. inoculation of KB cells were tested for its anticancer activity in vivo by oral administration of Scutellaria baicalensis at a dose of 1.5 mg/mouse (75 mg/kg), five times/wk for 7 wk. Scutellaria baicalensis and other agents demonstrated a strong growth inhibition in both tested human HNSCC

cell lines. No growth inhibition of HaCaT cells was observed with Scutellaria baicalensis. The IC50s were 150 μg/mL for Scutellaria baicalensis, 25 μM for celecoxib, and 75 μM for baicalein and indomethacin. Scutellaria baicalensis, as well as celecoxib and indomethacin, but not baicalein, suppressed proliferation cell nuclear antigen expression and PGE2 synthesis in both cell types. Scutellaria baicalensis inhibited COX-2 expression, whereas celecoxib inhibited COX-2 activity directly. A 66% reduction in tumor mass was observed in the nude mice.

Scutellaria baicalensis selectively and effectively inhibits cancer cell growth in vitro and in vivo and can be an effective chemotherapeutic agent for HNSCC. Inhibition of PGE2 synthesis via suppression of COX-2 expression may be responsible for its anticancer activity. Differences in biol. effects of Scutellaria baicalensis compared with baicalein suggest the synergistic effects among components in Scutellaria baicalensis.

IT **491-67-8**, Baicalein
RL: **PAC (Pharmacological activity)**; **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(comparison compound; inhibition of cancer cell proliferation and prostaglandin E2 synthesis by Scutellaria baicalensis)
RN 491-67-8 CAPLUS
CN 4H-1-Benzopyran-4-one, 5,6,7-trihydroxy-2-phenyl- (9CI) (CA INDEX NAME)



IT **329900-75-6**, **Cyclooxygenase-2**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(suppression of **COX-2** expression; **inhibition** of cancer cell proliferation and prostaglandin E2 synthesis by Scutellaria baicalensis)
RN 329900-75-6 CAPLUS
CN Synthetase, prostaglandin endoperoxide, 2 (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

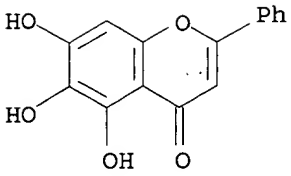
L30 ANSWER 22 OF 36 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:22700 CAPLUS
DOCUMENT NUMBER: 138:66652
TITLE: Method for generating, screening, and dereplicating natural product libraries for the discovery of therapeutic agents
INVENTOR(S): Jia, Qi; Hong, Mei-Feng
PATENT ASSIGNEE(S): Unigen Pharmaceuticals, Inc., USA
SOURCE: PCT Int. Appl., 111 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

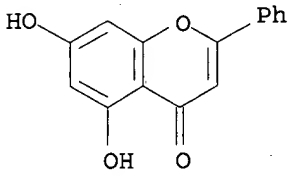
WO 2003002134	A1	20030109	WO 2002-US20602	20020627
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2451844	AA	20030109	CA 2002-2451844	20020627
US 2003113797	A1	20030619	US 2002-185758	20020627
EP 1411958	A1	20040428	EP 2002-746757	20020627
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2005504958	T2	20050217	JP 2003-508373	20020627
PRIORITY APPLN. INFO.:			US 2001-301523P P	20010627
			WO 2002-US20602 W	20020627

OTHER SOURCE(S): MARPAT 138:66652
ED Entered STN: 10 Jan 2003
AB The invention relates generally to a technol. platform, referred to as PhytologixTM for the discovery of novel bioactive pharmaceutical, nutraceutical and cosmetic agents. Specifically, the invention includes an integrated system for the collection of medicinal plants and creation of informatic databases related to these plants. The invention also relates to an improved standardized extraction and fractionation process, which provides significant advantages over the prior art in the terms of simplicity, efficiency of the sepns., the quality of the library, low cost of the process and extraordinary throughput. The invention provides details to the structure dereplication process by utilizing the technol. such as HPLC/PDA/MS coupled with high throughput bioassay data and an internal pure compound library. It has been proven to be much more efficient and accurate when compared to the prior art methods. Finally, the PhytologixTM platform has been approved as a realistic and efficient process by the determination of the whole process of discovery and development of natural COX-2 and tyrosinase inhibitors as novel nutraceutical and cosmetic products.
IT **329900-75-6**, **Cyclooxygenase 2**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(**inhibition**; method for generating, screening, and dereplicating natural product libraries for discovery of therapeutic agents)
RN 329900-75-6 CAPLUS
CN Synthetase, prostaglandin endoperoxide, 2 (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IT **491-67-8P**, Baicalein
RL: NPO (Natural product occurrence); **PAC (Pharmacological activity)**; PUR (Purification or recovery); **THU (Therapeutic use)**; BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses)
(method for generating, screening, and dereplicating natural product libraries for discovery of therapeutic agents)
RN 491-67-8 CAPLUS
CN 4H-1-Benzopyran-4-one, 5,6,7-trihydroxy-2-phenyl- (9CI) (CA INDEX NAME)



IT **480-40-0**
RL: PRP (Properties)
(method for generating, screening, and dereplicating natural product libraries for discovery of therapeutic agents)
RN 480-40-0 CAPLUS
CN 4H-1-Benzopyran-4-one, 5,7-dihydroxy-2-phenyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

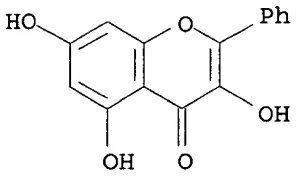
L30 ANSWER 23 OF 36 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:953358 CAPLUS
DOCUMENT NUMBER: 139:127612
TITLE: The role of the phenethyl ester of caffeic acid (CAPE) in the inhibition of rat lung cyclooxygenase activity by propolis
AUTHOR(S): Rossi, Antonietta; Longo, Rocco; Russo, Alessandra; Borrelli, Francesca; Sautebin, Lidia
CORPORATE SOURCE: Department of Experimental Pharmacology, University of Naples Federico II, Naples, Italy
SOURCE: Fitoterapia (2002), 73(Suppl. 1), S30-S37
CODEN: FTRPAE; ISSN: 0367-326X
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 17 Dec 2002
AB In this study we investigated the effect of an ethanolic extract of propolis, with and without CAPE, and some of its components on cyclooxygenase (COX) activity. Propolis (0.00003-0.03%) significantly and concentration-dependently inhibited COX activity from lung homogenate of saline- or LPS-treated rats. Same results were obtained with CAPE (0.1-100 μM). COX activity from lung homogenate of saline- or LPS-treated rats was also inhibited by galangin (0.1-100 μM), although the inhibition induced by the lowest concentration was not significant. Caffeic, ferulic, cinnamic and chlorogenic acids and pinocembrin, (0.1-100 μM) did not affect COX activity. The inhibition curves showed that CAPE and propolis were equipotent inhibitors, whereas galangin was significantly ($P<0.001$) less potent than propolis and CAPE. In order to better investigate the role of CAPE, we tested the action of an ethanolic extract of propolis (0.00003-0.03%) without CAPE. This extract significantly and concentration-dependently inhibited COX activity from lung homogenate of saline- or LPS-treated rats, however, it resulted to be approx. 10 times less potent than the extract containing CAPE.

The anal. of the inhibition curves of the extract with and without CAPE showed a significant ($P<0.001$) difference. These results suggest that both CAPE and galangin contribute to the overall activity of propolis, CAPE being more effective.

IT **329900-75-6, Cyclooxygenase 2**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(propolis, CAPE, and galangin in cyclooxygenase **inhibition** in lung)
RN 329900-75-6 CAPLUS
CN Synthetase, prostaglandin endoperoxide, 2 (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT **548-83-4**, Galangin
RL: **DMA (Drug mechanism of action)**; **PAC (Pharmacological activity)**; **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(propolis, CAPE, and galangin in cyclooxygenase inhibition in lung)
RN 548-83-4 CAPLUS
CN 4H-1-Benzopyran-4-one, 3,5,7-trihydroxy-2-phenyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

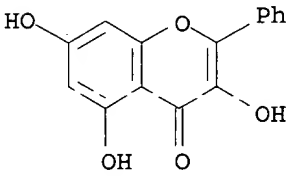
L30 ANSWER 24 OF 36 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:896595 CAPLUS
DOCUMENT NUMBER: 139:46663
TITLE: The inhibitory effect of propolis and caffeic acid phenethyl ester on cyclooxygenase activity in J774 macrophages
AUTHOR(S): Rossi, A.; Ligresti, A.; Longo, R.; Russo, A.; Borrelli, F.; Sautebin, L.
CORPORATE SOURCE: Department of Experimental Pharmacology, University of Naples, Naples, Italy
SOURCE: Phytomedicine (2002), 9(6), 530-535
CODEN: PYTOEY; ISSN: 0944-7113
PUBLISHER: Urban & Fischer Verlag GmbH & Co. KG
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 26 Nov 2002
AB The effect of an ethanolic extract of propolis, with and without CAPE, and some of its components on cyclooxygenase (COX-1 and COX-2) activity in J774 macrophages has been investigated. COX-1 and COX-2 activity, measured as prostaglandin E2 (PGE2) production, were concentration-dependently inhibited by propolis (3 + 10-3-3 + 102 μg/mL) with an IC50 of 2.7 μg/mL and 4.8 + 10-2 μg/mL, resp. Among the compds. tested pinocembrin and caffeic, ferulic, cinnamic and chlorogenic acids did not affect the activity of COX isoforms. Conversely, caffeic acid phenethyl ester (CAPE) (2.8 + 10-4-28 μg/mL; 10-9-10-4 M) and galangin (2.7 + 10-4-27 μg/mL; 10-9-10-4 M) were effective, the last being about ten-twenty times less potent. In fact the IC50 of CAPE for COX-1 and COX-2 were 4.4 + 10-1 μg/mL (1.5 + 10-6 M)

and 2 + 10-3 μg/mL (6.3 + 10-9 M), resp. The IC50 of galangin were 3.7 μg/mL (15 + 10-6 M) and 3 + 10-2 μg/mL (120 + 10-9 M), for COX-1 and COX-2 resp. To better investigate the role of CAPE, we tested the action of the ethanolic extract of propolis deprived of CAPE, which resulted about ten times less potent than the extract with CAPE in the inhibition of both COX-1 and COX-2, with an IC50 of 30 μg/mL and 5.3 + 10-1 μg/mL, resp. Moreover the comparison of the inhibition curves showed a significant difference. These results suggest that both CAPE and galangin contribute to the overall activity of propolis, CAPE being more effective.

IT **329900-75-6, COX 2**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(propolis and caffeic acid phenethyl ester **inhibitory** effect on cyclooxygenase activity in J774 macrophages and active components therein)
RN 329900-75-6 CAPLUS
CN Synthetase, prostaglandin endoperoxide, 2 (9CI) (CA INDEX NAME)

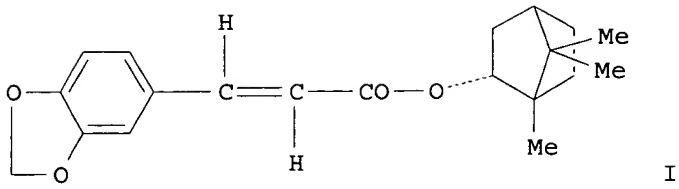
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT **548-83-4**, Galangin
RL: **PAC (Pharmacological activity)**; BIOL (Biological study)
(propolis and caffeic acid phenethyl ester inhibitory effect on cyclooxygenase activity in J774 macrophages and active components therein)
RN 548-83-4 CAPLUS
CN 4H-1-Benzopyran-4-one, 3,5,7-trihydroxy-2-phenyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:754 CAPLUS
DOCUMENT NUMBER: 136:197008
TITLE: Novel compounds from Piper methysticum Forst (Kava Kava) roots and their effect on cyclooxygenase enzyme
AUTHOR(S): Wu, Di; Nair, Muraleedharan G.; DeWitt, David L.
CORPORATE SOURCE: Bioactive Natural Products and Phytoceuticals Department of Horticulture and National Food Safety and Toxicology Center and Department of Biochemistry, Michigan State University, East Lansing, MI, 48824, USA
SOURCE: Journal of Agricultural and Food Chemistry (2002), 50(4), 701-705
CODEN: JAFCAU; ISSN: 0021-8561
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 31 Dec 2001
GI



I

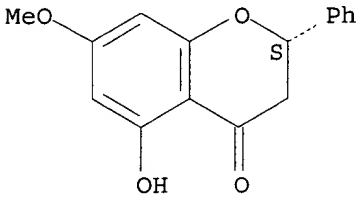
AB Milled Piper methysticum roots were extracted sequentially with hot water and methanol. Cyclooxygenase (COX) enzyme inhibitory assay directed purification of the methanol extract yielded bornyl esters of 3,4-methylenedioxy cinnamic acid (I) and cinnamic acid (II), pinostrobin (III), flavokawain B (IV), and 5,7-dimethoxyflavanone (V). The structures of compds. I-V were accomplished by spectral expts. The aqueous extract contained previously reported kava lactones, as confirmed by TLC anal. Compds. III and V were isolated for the first time from kava kava roots. Compound IV showed the highest COX-I inhibitory activity at 100 μg/mL. All the compds. tested gave good COX-I and moderate COX-II enzyme inhibitory activities at 100 μg/mL. This is the first report of COX-I and -II inhibitory activities for compds. 1-5.

IT **480-37-5**, Pinostrobin **36052-66-1**, 5,7-Dimethoxyflavanone
RL: BSU (Biological study, unclassified); **PAC (Pharmacological activity)**; BIOL (Biological study)
(cyclooxygenase inhibitors from Piper methysticum)

RN 480-37-5 CAPLUS

CN 4H-1-Benzopyran-4-one, 2,3-dihydro-5-hydroxy-7-methoxy-2-phenyl-, (2S)- (9CI) (CA INDEX NAME)

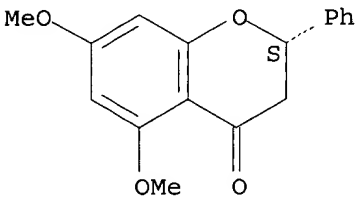
Absolute stereochemistry. Rotation (-).



RN 36052-66-1 CAPLUS

CN 4H-1-Benzopyran-4-one, 2,3-dihydro-5,7-dimethoxy-2-phenyl-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

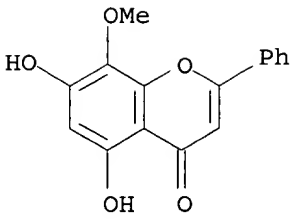


IT **329900-75-6**, **Cyclooxygenase 2**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(**inhibitor**; cyclooxygenase **inhibitors** from Piper methysticum)

RN 329900-75-6 CAPLUS
CN Synthetase, prostaglandin endoperoxide, 2 (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 26 OF 36 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:591840 CAPLUS
DOCUMENT NUMBER: 135:366461
TITLE: **Inhibition** of TPA-induced **cyclooxygenase-2** expression and skin inflammation in mice by wogonin, a plant flavone from Scutellaria radix
AUTHOR(S): Park, B. K.; Heo, M. Y.; Park, H.; Kim, H. P.
CORPORATE SOURCE: Kangwon National University, College of Pharmacy, Chunchon, 200-701, S. Korea
SOURCE: European Journal of Pharmacology (2001), 425(2), 153-157
CODEN: EJPHAZ; ISSN: 0014-2999
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 15 Aug 2001
AB Wogonin (5,7-dihydroxy-8-methoxyflavone), isolated from Scutellaria radix, was previously reported to inhibit the expression and activity of the enzyme cyclooxygenase-2 in lipopolysaccharide (LPS)-stimulated cells of a mouse macrophage cell line, RAW 264.7. Here, to find in vivo effects, inhibition by wogonin of 12-O-tetradecanoylphorbol-13-acetate (TPA)-induced cyclooxygenase-2 expression and anti-inflammatory activity in vivo were investigated. When applied topically to the dorsal skin of mice, wogonin at doses of 50-200 μg/site/treatment (total of five treatments in 3 days) inhibited cyclooxygenase-2 expression and prostaglandin E2 production induced by multiple treatments with TPA. At 200 μg/site/treatment, wogonin caused a 55.3% reduction of prostaglandin E2 production on the dorsal skin compared with an increased production in the TPA-treated control group. The same compound significantly inhibited mouse ear edema induced by TPA in both preventive (58.1% inhibition) as well as curative treatment (31.3% inhibition) schedules at 200 μg/ear/treatment. Inhibition of neutrophil infiltration was also observed Therefore, wogonin may be beneficial for cyclooxygenase-2-related skin disorders.
IT **632-85-9**, Wogonin
RL: **BAC (Biological activity or effector, except adverse)**; BSU (Biological study, unclassified); **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(**inhibition** of TPA-induced **cyclooxygenase-2** expression and skin inflammation in mice by wogonin)
RN 632-85-9 CAPLUS
CN 4H-1-Benzopyran-4-one, 5,7-dihydroxy-8-methoxy-2-phenyl- (9CI) (CA INDEX NAME)



IT **329900-75-6, Cyclooxygenase-2**
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(inhibition of TPA-induced **cyclooxygenase-2** expression and skin inflammation in mice by wogonin)
RN 329900-75-6 CAPLUS
CN Synthetase, prostaglandin endoperoxide, 2 (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

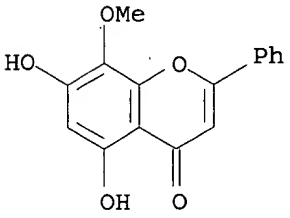
L30 ANSWER 27 OF 36 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:575376 CAPLUS
DOCUMENT NUMBER: 136:465
TITLE: The plant flavonoid wogonin suppresses death of activated C6 rat glial cells by inhibiting nitric oxide production
AUTHOR(S): Kim, H.; Kim, Y. S.; Kim, S. Y.; Suk, K.
CORPORATE SOURCE: Graduate School of East-West Medical Science, Department of Herbal Pharmacology, Kyung Hee University, Tongdaemun-ku, Hoegi-dong, Seoul, 130-701, S. Korea
SOURCE: Neuroscience Letters (2001), 309(1), 67-71
CODEN: NELED5; ISSN: 0304-3940
PUBLISHER: Elsevier Science Ireland Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 09 Aug 2001
AB Flavonoids are a group of low mol. weight polyphenolic compds. derived from plants. 5,7-Dihydroxy-8-methoxyflavone (Wogonin), a flavonoid originated from the root of Scutellaria baicalensis Georgi, has been shown to exert various anti-inflammatory effects such as inhibition of nitric oxide (NO) and prostaglandin E2 production in macrophages. Because glial cells have been previously shown to undergo NO-dependent apoptosis upon inflammatory activation and this auto-regulatory process may be neg. affected by exogenous factors possessing anti-inflammatory activities, we examined the effects of wogonin on NO production and activation-induced cell death of C6 rat glial cells. Activation of C6 glial cells with lipopolysaccharide (LPS), interferon-γ, and tumor necrosis factor-α induced NO production followed by cell death. Pretreatment of C6 cells with wogonin before LPS and cytokine treatment dose-dependently inhibited NO production as well as death of activated C6 cells. Wogonin-mediated inhibition of NO production was accompanied by suppression of inducible nitric oxide synthase (iNOS) protein induction and nuclear factor kappa B (NF-κB) reporter activity. Wogonin, however, did not affect a NO donor-induced cytotoxicity. Taken together, our results indicate that wogonin inhibits activation-induced death of C6 glial cells by suppressing NO production, and these inhibitory effects of wogonin on NO production are exerted through

inhibition of NF-κB-mediated iNOS induction.

IT **632-85-9**, Wogonin
RL: **DMA (Drug mechanism of action)**; **PAC (Pharmacological activity)**; **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(plant flavonoid wogonin suppresses death of activated C6 rat glial cells by inhibiting nitric oxide production)

RN 632-85-9 CAPLUS

CN 4H-1-Benzopyran-4-one, 5,7-dihydroxy-8-methoxy-2-phenyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 28 OF 36 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:319721 CAPLUS
DOCUMENT NUMBER: 134:336233
TITLE: Flavones as inducible nitric oxide synthase **inhibitors**, **cyclooxygenase-2 inhibitors**, and potassium channel activators, and therapeutic use
INVENTOR(S): Lee, Tony Jer-Fu; Chen, Yang Ling Ling
PATENT ASSIGNEE(S): Board of Trustees of Southern Illinois University, USA
SOURCE: PCT Int. Appl., 97 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001030342	A1	20010503	WO 2000-US41396	20001020
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6806257	B1	20041019	US 2000-693130	20001020
PRIORITY APPLN. INFO.:			US 1999-160612P P	19991020

OTHER SOURCE(S): MARPAT 134:336233

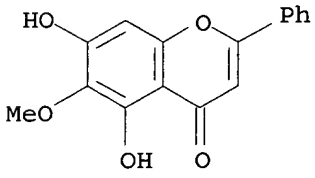
ED Entered STN: 04 May 2001

AB A method is provided for inhibiting expression of either iNOS or COX-2, or both in mammals using flavone compds., and pharmaceutically acceptable salts thereof. The present invention also provides a method of activating

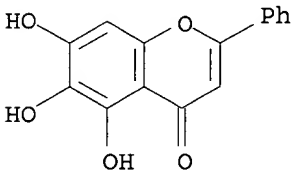
potassium channels in mammals, as well as methods for treating septic shock, for inhibiting expression of angiotensin-converting enzyme, for treating or preventing aneurysms, and for reducing inflammation and related pathol. changes using these compds. Presently preferred compds. are oroxylin A (5,7-dihydroxy-6-methoxy flavone) and wogonin (5,7-dihydroxy-8-methoxy flavone).

IT **480-11-5**, Oroxylin A **491-67-8**, Baicalein
632-85-9, Wogonin **4431-41-8 18956-18-8**
21967-41-9, Baicalin
RL: **BAC (Biological activity or effector, except adverse)**; BSU (Biological study, unclassified); **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(flavones as inducible NO synthase **inhibitors**, **cyclooxygenase-2 inhibitors**, and potassium channel activators, and therapeutic use)

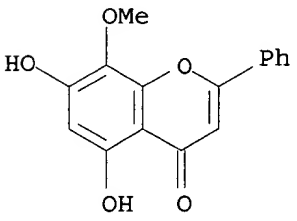
RN 480-11-5 CAPLUS
CN 4H-1-Benzopyran-4-one, 5,7-dihydroxy-6-methoxy-2-phenyl- (9CI) (CA INDEX NAME)



RN 491-67-8 CAPLUS
CN 4H-1-Benzopyran-4-one, 5,6,7-trihydroxy-2-phenyl- (9CI) (CA INDEX NAME)

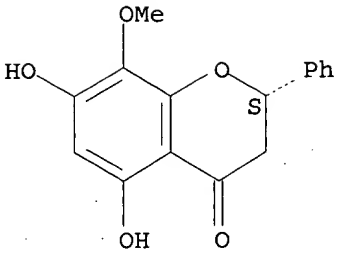


RN 632-85-9 CAPLUS
CN 4H-1-Benzopyran-4-one, 5,7-dihydroxy-8-methoxy-2-phenyl- (9CI) (CA INDEX NAME)



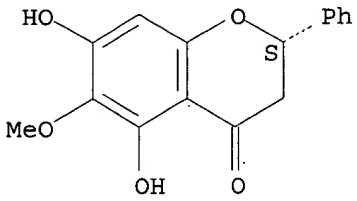
RN 4431-41-8 CAPLUS
CN 4H-1-Benzopyran-4-one, 2,3-dihydro-5,7-dihydroxy-8-methoxy-2-phenyl-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



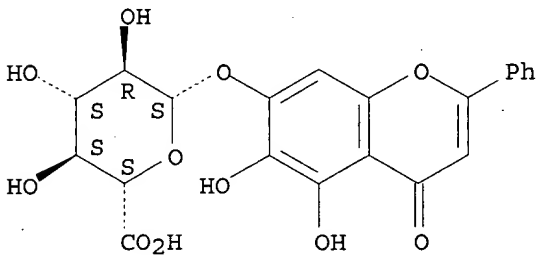
RN 18956-18-8 CAPLUS
CN 4H-1-Benzopyran-4-one, 2,3-dihydro-5,7-dihydroxy-6-methoxy-2-phenyl-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 21967-41-9 CAPLUS
CN β-D-Glucopyranosiduronic acid, 5,6-dihydroxy-4-oxo-2-phenyl-4H-1-benzopyran-7-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT **329900-75-6, Cyclooxygenase 2**
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(flavones as inducible NO synthase **inhibitors**, **cyclooxygenase-2 inhibitors**, and potassium channel activators, and therapeutic use)
RN 329900-75-6 CAPLUS
CN Synthetase, prostaglandin endoperoxide, 2 (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 29 OF 36 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:293393 CAPLUS
DOCUMENT NUMBER: 135:102178

TITLE: Wogonin, baicalin, and baicalein **inhibition** of inducible nitric oxide synthase and **cyclooxygenase-2** gene expressions induced by nitric oxide synthase **inhibitors** and lipopolysaccharide

AUTHOR(S): Chen, Y.-C.; Shen, S.-C.; Chen, L.-G.; Lee, T. J.-F.; Yang, L.-L.

CORPORATE SOURCE: Graduate Institute of Pharmacognosy Science, Taipei Medical University, Taipei, Taiwan

SOURCE: Biochemical Pharmacology (2001), 61(11), 1417-1427
CODEN: BCPCA6; ISSN: 0006-2952

PUBLISHER: Elsevier Science Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

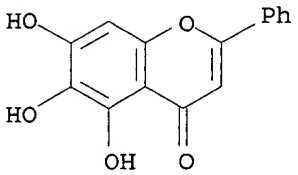
ED Entered STN: 25 Apr 2001

AB We previously reported that oroxylin A, a polyphenolic compound, was a potent inhibitor of lipopolysaccharide (LPS)-induced expression of inducible nitric oxide synthase (iNOS) and cyclooxygenase-2 (COX-2). In the present study, three oroxylin A structurally related polyphenols isolated from the Chinese herb Huang Qui, namely baicalin, baicalein, and wogonin, were examined for their effects on LPS-induced nitric oxide (NO) production and iNOS and COX-2 gene expressions in RAW 264.7 macrophages. The results indicated that these three polyphenolic compds. inhibited LPS-induced NO production in a concentration-dependent manner without a notable cytotoxic effect on these cells. The decrease in NO production was in parallel with the inhibition by these polyphenolic compds. of LPS-induced iNOS gene expression. However, these three compds. did not directly affect iNOS enzyme activity. In addition, wogonin, but not baicalin or baicalein, inhibited LPS-induced prostaglandin E2 (PGE2) production and COX-2 gene expression without affecting COX-2 enzyme activity. Furthermore, N-nitro-l-arginine (NLA) and N-nitro-l-arginine Me ester (L-NAME) pretreatment enhanced LPS-induced iNOS (but not COX-2) protein expression, which was inhibited by these three polyphenolic compds. Wogonin, but not baicalin or baicalein, similarly inhibited PGE2 production and COX-2 protein expression in NLA/LPS or L-NAME/LPS-co-treated RAW 264.7 cells. These results indicated that co-treatment with NOS inhibitors and polyphenolic compds. such as wogonin effectively blocks acute production of NO and, at the same time, inhibits expression of iNOS and COX-2 genes.

IT **491-67-8P**, Baicalein **632-85-9P**, Wogonin
21967-41-9P, Baicalin
RL: **BAC (Biological activity or effector, except adverse)**; BSU (Biological study, unclassified); PUR (Purification or recovery); BIOL (Biological study); PREP (Preparation)
(wogonin baicalin and baicalein **inhibit** inducible nitric oxide synthase and **cyclooxygenase-2** gene expression)

RN 491-67-8 CAPLUS

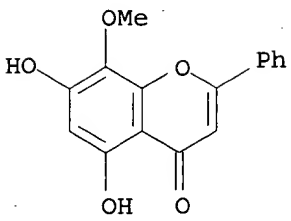
CN 4H-1-Benzopyran-4-one, 5,6,7-trihydroxy-2-phenyl- (9CI) (CA INDEX NAME)



RN 632-85-9 CAPLUS

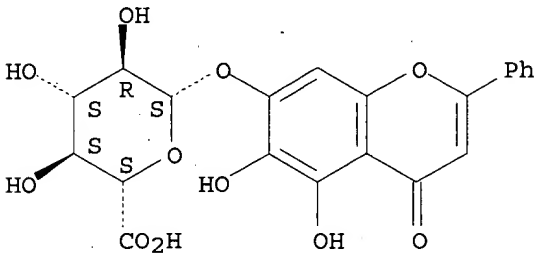
CN 4H-1-Benzopyran-4-one, 5,7-dihydroxy-8-methoxy-2-phenyl- (9CI) (CA INDEX

NAME)



RN 21967-41-9 CAPLUS
CN β-D-Glucopyranosiduronic acid, 5,6-dihydroxy-4-oxo-2-phenyl-4H-1-benzopyran-7-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT **329900-75-6, cyclooxygenase-2**
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(wogonin baicalin and baicalein **inhibit** inducible nitric oxide synthase and **cyclooxygenase-2** gene expression)
RN 329900-75-6 CAPLUS
CN Synthetase, prostaglandin endoperoxide, 2 (9CI) (CA INDEX NAME)

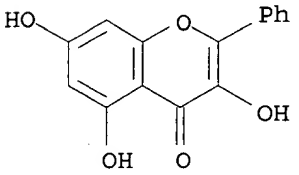
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
REFERENCE COUNT: 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 30 OF 36 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:59686 CAPLUS
DOCUMENT NUMBER: 134:222030
TITLE: **Inhibition** of inducible nitric oxide synthase and **cyclooxygenase-2** expression by flavonoids in macrophage J774A.1
AUTHOR(S): Raso, Giuseppina Mattace; Meli, Rosaria; Di Carlo, Giulia; Pacilio, Maria; Di Carlo, Raffaele
CORPORATE SOURCE: Department of Experimental Pharmacology, University of Naples "Federico II", Naples, Italy
SOURCE: Life Sciences (2001), 68(8), 921-931
CODEN: LIFSAK; ISSN: 0024-3205
PUBLISHER: Elsevier Science Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 25 Jan 2001
AB The present study focuses on the effect of various naturally occurring

flavonoids (apigenin, galangin, morin, naringenin, quercetin, and silymarin) on nitric oxide (NO) and prostaglandin E2 (PGE2) production induced by lipopolysaccharide (LPS) in the macrophage cell line J774A.1. Moreover, the authors evaluated flavonoid modulation of inducible nitric oxide synthase (iNOS) and cyclooxygenase-2 (COX-2) enzyme expression by western blot anal. Apigenin and quercetin (0.5-50 μM) were the most potent inhibitors of NO production and this effect was concentration-dependent and significant at 5 and 50 μM. These data were consistent with the modulation of iNOS enzyme expression. A similar pattern was observed considering the inhibitory effect of flavonoids on LPS-induced PGE2 release and COX-2 expression. Quercetin, galangin, apigenin, and naringenin markedly decreased PGE2 release and COX-2 expression in a concentration-dependent manner. This study suggests that inhibition of iNOS and COX-2 expression by flavonoids may be one of the mechanisms responsible for their anti-inflammatory effects.

IT **548-83-4**, Galangin
RL: **BAC (Biological activity or effector, except adverse)**; BSU (Biological study, unclassified); BIOL (Biological study)
(nitric oxide synthase and **cyclooxygenase-2** expression **inhibition** by flavonoids in macrophage J774A.1)

RN 548-83-4 CAPLUS
CN 4H-1-Benzopyran-4-one, 3,5,7-trihydroxy-2-phenyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

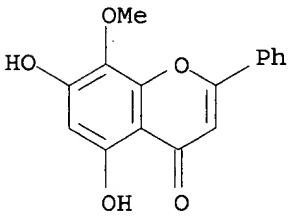
L30 ANSWER 31 OF 36 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2000:736092 CAPLUS
DOCUMENT NUMBER: 134:65939
TITLE: Wogonin inhibits inducible prostaglandin E2 production in macrophages
AUTHOR(S): Wakabayashi, I.; Yasui, K.
CORPORATE SOURCE: School of Medicine, Department of Hygiene and Preventive Medicine, Yamagata University, Yamagata, 990-9585, Japan
SOURCE: European Journal of Pharmacology (2000), 406(3), 477-481
CODEN: EJPHAZ; ISSN: 0014-2999
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 18 Oct 2000
AB Effects of 5,7-dihydroxy-8-methoxyflavone (wogonin) on cyclooxygenase-2 (COX-2)-mediated prostaglandin E2 production in macrophages were investigated. Stimulation with lipopolysaccharide (LPS; 1 μg/mL) greatly increased prostaglandin E2 production in RAW 264.7 murine macrophages. The stimulated prostaglandin E2 production was abolished in the presence of indomethacin (1 μM) or cycloheximide (2 μM), suggesting that the increased production of prostaglandin E2 by LPS reflects the inducible synthesis of prostaglandin

E2 by COX-2. Wogonin (0.1-50 μM) concentration-dependently inhibited inducible prostaglandin E2 production Wogonin at concns. as low as 0.5 μM directly attenuated enzymic activity of COX-2. The protein expression of COX-2 was depressed by wogonin at concns. of 10 μM and more. These results suggest that wogonin decreases inducible prostaglandin E2 production in macrophages by inhibiting both COX-2 activity and COX-2 expression. The former action requires much lower doses of wogonin. These wogonin actions may explain, in part, its anti-inflammatory action.

IT **632-85-9**, Wogonin
RL: **BAC (Biological activity or effector, except adverse)**; BSU (Biological study, unclassified); **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(wogonin inhibits inducible prostaglandin E2 production in macrophages)

RN 632-85-9 CAPLUS

CN 4H-1-Benzopyran-4-one, 5,7-dihydroxy-8-methoxy-2-phenyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 32 OF 36 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2000:429383 CAPLUS
DOCUMENT NUMBER: 133:190454
TITLE: Isolation of **COX-2 inhibitors** from Alpinia officinarum
AUTHOR(S): Kang, Sam Sik; Kim, Ju Sun; Son, Kun Ho; Kim, Hyun Pyo; Chang, Hyeun Wook
CORPORATE SOURCE: Natural Products Research Institute, Seoul National University, Seoul, 110-460, S. Korea
SOURCE: Saengyak Hakhoechi (2000), 31(1), 57-62
CODEN: SYHJAM; ISSN: 0253-3073
PUBLISHER: Korean Society of Pharmacognosy
DOCUMENT TYPE: Journal
LANGUAGE: Korean
ED Entered STN: 28 Jun 2000

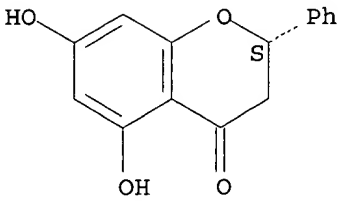
AB By bioassay-guided fractionation followed by chromatog. separation of the MeOH extract of Alpinia rhizome, five COX-2 inhibitors were isolated and characterized as pinocembrin, galangin 3-Me ether, galangin, kaempferid, and 5-hydroxy-7-(4''-hydroxy-3''-methoxyphenyl)-1-phenyl-3-heptanone.

IT **480-39-7**, Pinocembrin **548-83-4**, Galangin **6665-74-3**, Galangin 3-Methyl ether
RL: **BAC (Biological activity or effector, except adverse)**; BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(cytochrome c oxidase-2 inhibitors from Alpinia officinarum)

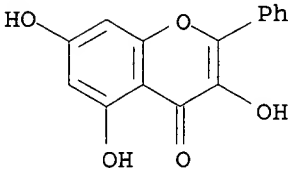
RN 480-39-7 CAPLUS

CN 4H-1-Benzopyran-4-one, 2,3-dihydro-5,7-dihydroxy-2-phenyl-, (2S)- (9CI) (CA INDEX NAME)

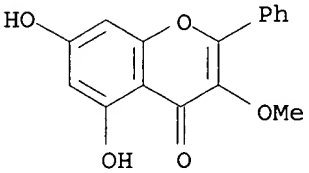
Absolute stereochemistry.



RN 548-83-4 CAPLUS
CN 4H-1-Benzopyran-4-one, 3,5,7-trihydroxy-2-phenyl- (9CI) (CA INDEX NAME)



RN 6665-74-3 CAPLUS
CN 4H-1-Benzopyran-4-one, 5,7-dihydroxy-3-methoxy-2-phenyl- (9CI) (CA INDEX NAME)



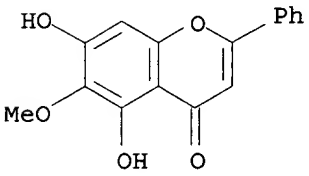
L30 ANSWER 33 OF 36 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2000:221498 CAPLUS
DOCUMENT NUMBER: 133:115041
TITLE: Oroxylin A **inhibition** of lipopolysaccharide-induced iNOS and **COX-2** gene expression via suppression of **nuclear factor-κB** activation
AUTHOR(S): Chen, Y.-C.; Yang, L.-L.; Lee, T. J.-F.
CORPORATE SOURCE: Department of Pharmacology, Southern Illinois University, School of Medicine, Springfield, IL, USA
SOURCE: Biochemical Pharmacology (2000), 59(11), 1445-1457
CODEN: BCPCA6; ISSN: 0006-2952
PUBLISHER: Elsevier Science Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 06 Apr 2000
AB Polyphenols are major components of many traditional herbal remedies, which exhibit several beneficial effects including anti-inflammation. The exact mechanism of the anti-inflammatory action of polyphenols, however, has not been determined In the present study, we examined the effects of eight different polyphenols isolated from Chinese herbs, including two flavonoids (myricitrin and oroxylin A), four ellagitannins

(penta-O-galloyl-β-glucopyranose, woodfordin C, oenothein B, and cuphiin D1), and two anthraquinones (emodin and physcion), on lipopolysaccharide (LPS)-induced nitric oxide (NO) production, and inducible nitric oxide synthase (iNOS) and cyclooxygenase-2 (COX-2) gene expression in RAW264.7 macrophages. The results indicated that only oroxylin A and emodin concentration-dependently inhibited LPS-induced NO production The remaining compds. slightly inhibited LPS-induced NO production only at the highest concentration examined Furthermore, oroxylin A inhibited the expression of LPS-induced iNOS and COX-2 proteins and mRNAs without an appreciable cytotoxic effect on RAW264.7 cells. Emodin also inhibited LPS-induced iNOS protein as potently as oroxylin A, but it inhibited LPS-induced iNOS mRNA expression only slightly and did not affect COX-2 mRNA and proteins. This was consistent with the findings that oroxylin A but not emodin or physcion inhibited prostaglandin E2 synthesis induced by LPS. The inhibitory effects of oroxylin A on LPS-induced iNOS and COX-2 gene expression were also demonstrated in Bcl-2-overexpressing RAW264.7 macrophages, suggesting that oroxylin A inhibition of iNOS and COX-2 expression was not due to its antioxidant effect. Furthermore, oroxylin A but not emodin blocked nuclear factor-κB (NF-κB) binding and transcriptional activation associated with decreased p65 proteins in the nucleus induced by LPS. These results indicated that oroxylin A, an active component in Huang Qin, inhibited LPS-induced iNOS and COX-2 gene expression by blocking NF-κB activation, whereas emodin inhibition of LPS-induced iNOS expression may be mediated by a different transcription factor.

IT **480-11-5**, Oroxylin A
RL: **BAC (Biological activity or effector, except adverse)**; BSU (Biological study, unclassified); **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(oroxylin A **inhibition** of lipopolysaccharide-induced iNOS and **COX-2** gene expression via suppression of **nuclear factor-κ B** activation)

RN 480-11-5 CAPLUS

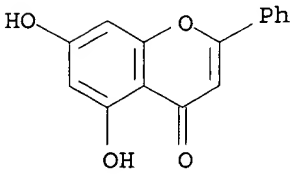
CN 4H-1-Benzopyran-4-one, 5,7-dihydroxy-6-methoxy-2-phenyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 34 OF 36 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1997:394438 CAPLUS
DOCUMENT NUMBER: 127:90161
TITLE: Casein kinase II is a selective target of HIV-1 transcriptional inhibitors
AUTHOR(S): Critchfield, J. William; Coligan, John E.; Folks, Thomas M.; Butera, Salvatore T.
CORPORATE SOURCE: Retrovirus Diseases Branch, Division Acquired Immunodeficiency Syndrome, Sexually Transmitted Diseases, Tuberculosis Laboratory Research, Centers

Disease Control Prevention, Atlanta, GA, 30333, USA
SOURCE: Proceedings of the National Academy of Sciences of the United States of America (1997), 94(12), 6110-6115
CODEN: PNASA6; ISSN: 0027-8424
PUBLISHER: National Academy of Sciences
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 26 Jun 1997
AB The identification of cellular factors that are required to complete various steps of the HIV-1 life cycle may lead to the development of new therapeutics. One key step, transcription from the integrated provirus, is inhibited by members of two distinct classes of compds., the flavonoids and the benzothiophenes, via an unknown mechanism, possibly involving a cellular factor. A marked specificity toward inhibiting HIV-1 transcription is evidenced by the ability of drug-treated cells to retain their proliferative and differentiation capabilities. In addition, the compds. do not impede the activation and function of the transcriptional factor NF-κB. Here we report on the identification of several cellular proteins that mediate the HIV-1 transcriptional inhibitory property of the flavonoid chrysin. Chemical and immunol. analyses identified these cellular proteins as the individual subunits of casein kinase II (CKII). Though structurally unrelated to chrysin, an HIV-1 inhibitory benzothiophene also bound selectively to CKII. Both chrysin and the benzothiophenes inhibited human recombinant CKII enzymic activity and showed competitive kinetics with respect to ATP, analogous to the classic CKII inhibitor 5,6-dichloro-1-β-D-ribofuranosylbenzimidazole (DRB). Moreover, DRB potently inhibited HIV-1 expression in chronically infected cells. CKII may regulate HIV-1 transcription by phosphorylating cellular proteins involved in HIV-1 transactivation that contain multiple CKII phosphorylation consensus sequences.
IT **480-40-0**, Chrysin
RL: **BAC (Biological activity or effector, except adverse)**; BSU (Biological study, unclassified); **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(casein kinase II is a selective target of HIV-1 transcriptional inhibitors)
RN 480-40-0 CAPLUS
CN 4H-1-Benzopyran-4-one, 5,7-dihydroxy-2-phenyl- (9CI) (CA INDEX NAME)



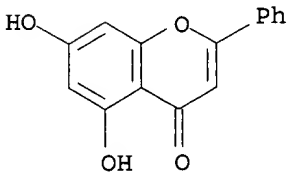
REFERENCE COUNT: 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 35 OF 36 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1997:54402 CAPLUS
DOCUMENT NUMBER: 126:139673
TITLE: Selective **inhibition** of tumor necrosis factor-induced vascular cell adhesion molecule-1 gene expression by a novel flavonoid. Lack of effect on transcription factor **NF**-κ **B**
AUTHOR(S): Woelle, Joachim; Hill, Russell R.; Ferguson, Erika;

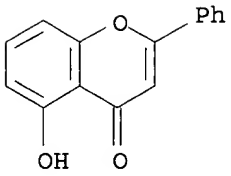
Devall, Larry J.; Trivedi, B. K.; Newton, Roger S.; Saxena, Uday
CORPORATE SOURCE: Dep. Atherosclerosis Therapeutics & Chem., Warner Lambert Co., Ann Arbor, MI, USA
SOURCE: Arteriosclerosis, Thrombosis, and Vascular Biology (1996), 16(12), 1501-1508
CODEN: ATVBFA; ISSN: 1079-5642
PUBLISHER: American Heart Association
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 25 Jan 1997
AB In the present studies, we examined the effect of flavonoids on the endothelial cell expression of adhesion mols., an early step in inflammation and atherogenesis. Addition of tumor necrosis factor-α (TNF) to human aortic endothelial cells (HAECs) led to the induction of vascular cell adhesion mol.-1 (VCAM-1) expression and enhancement in expression of intercellular adhesion mol.-1 (ICAM-1). A flavonoid, 2-(3-amino-phenyl)-8-methoxy-chromene-4-one (PD 098063), markedly inhibited TNF-induced VCAM-1 cell-surface expression in a concentration-dependent fashion with half-maximal inhibition at 19 μmol/L but had no effect on ICAM-1 expression. Another structurally distinct flavonoid, 2-phenyl-chromene-4-one, similarly selectively decreased VCAM-1 expression. The inhibition in cell-surface expression of VCAM-1 by PD 098063 correlated with decreases in steady-state mRNA levels, but there was no effect on ICAM-1 mRNA levels. The decrease in VCAM-1 mRNA levels was not due to changes in mRNA stability but rather resulted from a reduction in the rate of transcription of the gene. However, electrophoretic mobility shift assays using nuclear exts. from TNF-induced HAECs treated with PD 098063 failed to show a decrease in the activation of NF-κB, indicating that inhibition of activation of this transcription factor may not be its mode of action. Similarly, PD 098063 did not affect chloramphenicol acetyltransferase reporter gene activity in TNF-inducible minimal VCAM-1 promoter constructs containing two NF-κB sites, suggesting that the compound does not affect the transactivation driven by these sites. We conclude that this compound selectively blocks agonist-induced VCAM-1 protein and gene expression in HAECs by NF-κB-independent mechanism(s).

IT **480-40-0 491-78-1 525-82-6 35244-11-2 70460-18-3**
RL: **BAC (Biological activity or effector, except adverse)**; BSU (Biological study, unclassified); BIOL (Biological study)
(flavonoid PD 098063 **blocks** agonist-induced VCAM-1 protein and gene expression in human aortic endothelial cells by **NF-κB**-independent mechanism)

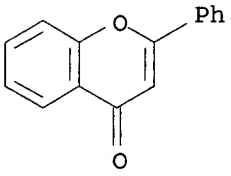
RN 480-40-0 CAPLUS
CN 4H-1-Benzopyran-4-one, 5,7-dihydroxy-2-phenyl- (9CI) (CA INDEX NAME)



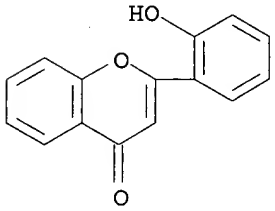
RN 491-78-1 CAPLUS
CN 4H-1-Benzopyran-4-one, 5-hydroxy-2-phenyl- (9CI) (CA INDEX NAME)



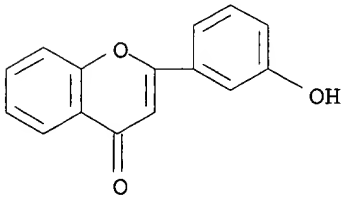
RN 525-82-6 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-phenyl- (9CI) (CA INDEX NAME)



RN 35244-11-2 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-(2-hydroxyphenyl)- (9CI) (CA INDEX NAME)



RN 70460-18-3 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-(3-hydroxyphenyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

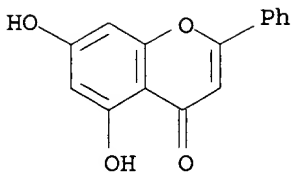
L30 ANSWER 36 OF 36 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1996:530188 CAPLUS
DOCUMENT NUMBER: 125:193182
TITLE: **Inhibition** by antioxidants of nitric oxide synthase expression in murine macrophages: role of **nuclear factor κ B** and interferon regulatory factor 1
AUTHOR(S): Hecker, Markus; Preiss, Christiane; Klemm, Peter; Busse, Rudi

Searched by Barb O'Bryen, STIC 2-2518

CORPORATE SOURCE: Centre Physiology, Johann Wolfgang Goethe University Clinic, Frankfurt/M., Germany
SOURCE: British Journal of Pharmacology (1996), 118(8), 2178-2184
CODEN: BJPCBM; ISSN: 0007-1188
PUBLISHER: Stockton
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 05 Sep 1996

AB In view of the potential deleterious effects of high amts. of nitric oxide (NO) produced by the inducible isoform of NO synthase (iNOS) in inflammation, the prevention of the expression of this enzyme represents an important therapeutic goal. In cytokine-stimulated cells activation of nuclear factor κB (NF-κB) is crucial for the increase in iNOS gene expression. Since NF-κB activation appears to involve a redox-sensitive step, the authors investigated whether 3 structurally unrelated antioxidants, 5,7-dihydroxyflavone (chrysin), 3,4-dichloroisocoumarin (DCI), and N-acetyl 5-hydroxytryptamine (N-acetylserotonin, NAS), affect iNOS expression in cultured RAW 264.7 monocyte/macrophages stimulated with bacterial lipopolysaccharide (LPS, 140 ng ml-1) and interferon-γ (IFNγ, 5 u ml-1). During a 6 h incubation period neither LPS nor IFNγ alone exerted an effect but when combined, caused a prominent increase in nitrite formation, iNOS mRNA and protein abundance. Coincubation with chrysin (50 μM), DCI (50 μM), or NAS (1 mM) markedly attenuated this increase in iNOS gene expression. DCI, but not chrysin or NAS, prevented the activation of NF-κB in cells exposed to LPS plus IFNγ for 30 min. In contrast, all 3 antioxidants blunted the DNA-binding activity of interferon regulatory factor 1 (IRF-1), which mediates the synergistic effect of IFNγ on iNOS gene expression in cells treated for 2 h with LPS plus IFNγ. DCI thus appears to inhibit iNOS gene expression at the transcriptional level by preventing the activation of both NF-κB and IRF-1. The inhibitory effect of DCI on NF-κB activation, however, does not seem to be related to its antioxidative properties, since DCI, unlike chrysin or NAS, is a potent serine protease inhibitor which stabilizes the inactive NF-κB complex by protecting the inhibitory IκB-α subunit from proteolytic degradation The virtually identical inhibitory effect of chrysin, DCI, and NAS on the activation of IRF-1 points to a redox-sensitive step in the activation of this transcription factor, which in contrast to NF-κB requires de novo protein synthesis. Since iNOS gene expression in human cells and tissues usually requires the combination of several cytokines, antioxidants such as chrysin and NAS which do not interfere with the activation of NF-κB may be of therapeutic value for selectively inhibiting the enhanced expression of this enzyme in inflammation.

IT **480-40-0**, Chrysin
RL: **BAC (Biological activity or effector, except adverse)**; BSU (Biological study, unclassified); BIOL (Biological study)
(**NF**-κ **B** and interferon regulatory factor 1 role in **inhibition** by antioxidants of nitric oxide synthase gene expression in macrophages stimulated with lipopolysaccharide and interferon-γ)
RN 480-40-0 CAPLUS
CN 4H-1-Benzopyran-4-one, 5,7-dihydroxy-2-phenyl- (9CI) (CA INDEX NAME)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L8              STR
L10         15296 SEA FILE=REGISTRY SSS FUL L8
L17             STR
L20             STR
L22          1370 SEA FILE=REGISTRY SUB=L10 SSS FUL (L17 AND L20)
L26          1643 SEA FILE=CAPLUS ABB=ON  L22(L)(THU OR PAC OR PKT OR DMA OR
                  BAC)/RL
L32           103 SEA FILE=CAPLUS ABB=ON  L22 AND REVIEW/DT
L33            31 SEA FILE=CAPLUS ABB=ON  L26 AND L32

L34            31 L33 NOT L30

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compounds are well known. These are review articles discussing compounds for any therapeutic use

previously printed

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L34  ANSWER 1 OF 31  CAPLUS  COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:         2005:197774  CAPLUS
DOCUMENT NUMBER:          142:403184
TITLE:                    The research progress of flavone and isoflavone on
                          inhibition oncogenic cell proliferation
AUTHOR(S):                Liu, Shu; Han, Jing; Wang, Luya
CORPORATE SOURCE:         Institute of Basic Medical Sciences, Chinese Academy
                          of Medical Sciences and Peking Union Medical College,
                          Beijing, 100005, Peop. Rep. China
SOURCE:                   Zhongguo Yaoxue Zazhi (Beijing, China) (2004), 39(1),
                          4-7
                          CODEN: ZYZAEU; ISSN: 1001-2494
PUBLISHER:                Zhongguo Yaoxue Zazhishe
DOCUMENT TYPE:            Journal; General Review
LANGUAGE:                 Chinese
ED   Entered STN:  07 Mar 2005
AB   A review on the research progress of effects of flavone and isoflavone on
     inhibiting oncogenic cell proliferation, including inhibiting activity of
     tyrosine kinase, topoisomerase, cyclin depend kinase (CDK), and selective
     estrogen receptor mediator (SERM) function.
IT   525-82-6, Flavone 574-12-9, Isoflavone
     RL: PAC (Pharmacological activity); THU (Therapeutic
     use); BIOL (Biological study); USES (Uses)
        (the research progress of flavone and isoflavone on inhibition
        oncogenic cell proliferation)
RN   525-82-6  CAPLUS
CN   4H-1-Benzopyran-4-one, 2-phenyl- (9CI)  (CA INDEX NAME)
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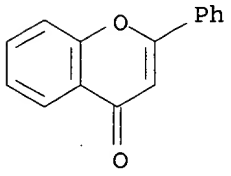


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RN   574-12-9  CAPLUS
CN   4H-1-Benzopyran-4-one, 3-phenyl- (9CI)  (CA INDEX NAME)
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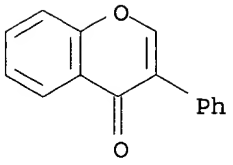
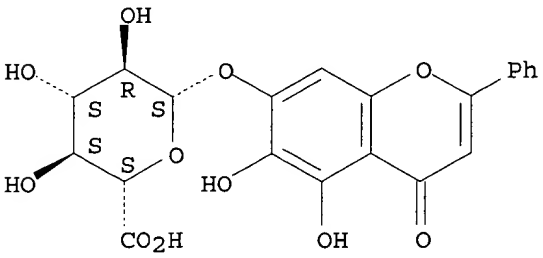


L34 ANSWER 2 OF 31 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:790845 CAPLUS
DOCUMENT NUMBER: 142:232111
TITLE: Current situation in pharmacological study on baicalin
AUTHOR(S): Zhang, Xiping; Tian, Hua; Cheng, Qihui
CORPORATE SOURCE: Department of General Surgery, the First People's Hospital of Hangzhou, Hangzhou, 310006, Peop. Rep. China
SOURCE: Zhongguo Yaolixue Tongbao (2003), 19(11), 1212-1215
CODEN: ZYTOE8; ISSN: 1001-1978
PUBLISHER: Anhui Yike Daxue Linchuan Yaoli Yanjiuso
DOCUMENT TYPE: Journal; **General Review**
LANGUAGE: Chinese
ED Entered STN: 29 Sep 2004
AB A review with 32 refs. on current situation in pharmacol. study on baicalin with subdivision headings: (1) Oxygen free radical-scavenging and antioxidn. effects; (2) regulatory effect on immune function; (3) protective effect on ischemia- reperfusion injury; (4) effect on apoptosis; (5) effects on arachidonic acid system; (6) inhibitory effect on microbe growth; clin. application; (8) other effects is presented.
IT **21967-41-9**, Baicalin
RL: **PAC (Pharmacological activity)**; **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(pharmacol. study on baicalin)
RN 21967-41-9 CAPLUS
CN β-D-Glucopyranosiduronic acid, 5,6-dihydroxy-4-oxo-2-phenyl-4H-1-benzopyran-7-yl (9CI) (CA INDEX NAME)

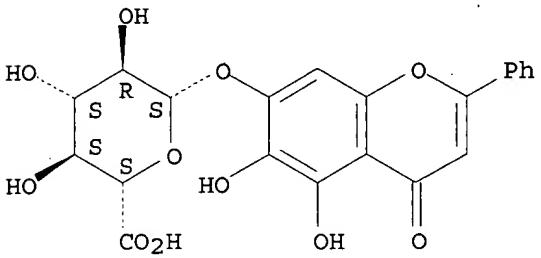
Absolute stereochemistry.



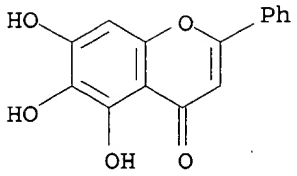
L34 ANSWER 3 OF 31 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:714918 CAPLUS
DOCUMENT NUMBER: 142:189787
TITLE: Research on anti-endotoxin effects of Chinese medicine chemical components
AUTHOR(S): Liu, Jin
CORPORATE SOURCE: Fujian Provincial Medicines Co., Fuzhou, 350001, Peop. Rep. China

SOURCE: Yiyao Daobao (2004), 23(7), 486-488
CODEN: YDIAAL; ISSN: 1004-0781
PUBLISHER: Yiyao Daobao Zazhishe
DOCUMENT TYPE: Journal; **General Review**
LANGUAGE: Chinese
ED Entered STN: 02 Sep 2004
AB A review. Research on anti-endotoxin effects of Chinese medicine chemical components is reviewed including gypenosides,. ginkgolide B and A, ginsenoside, baicalin, anisodamine, and danshensu etc. as examples.
IT **21967-41-9**, Baicalin
RL: **PAC (Pharmacological activity)**; **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(research on anti-endotoxin effects of Chinese medicine chemical components)
RN 21967-41-9 CAPLUS
CN β-D-Glucopyranosiduronic acid, 5,6-dihydroxy-4-oxo-2-phenyl-4H-1-benzopyran-7-yl (9CI) (CA INDEX NAME)

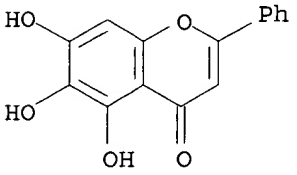
Absolute stereochemistry.



L34 ANSWER 4 OF 31 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:714893 CAPLUS
DOCUMENT NUMBER: 142:189779
TITLE: Research Advances in antiviral Chinese medicine
AUTHOR(S): Liu, Fu-qiang; Wang, Wei-dong; Tang, Zhen
CORPORATE SOURCE: Dep. of Pharmacy, The 208th Hospital of PLA, Changchun, Jilin, 130062, Peop. Rep. China
SOURCE: Yiyao Daobao (2004), 23(8), 536-538
CODEN: YDIAAL; ISSN: 1004-0781
PUBLISHER: Yiyao Daobao Zazhishe
DOCUMENT TYPE: Journal; **General Review**
LANGUAGE: Chinese
ED Entered STN: 02 Sep 2004
AB A review. Research Advances in antiviral Chinese medicine is reviewed including the antiviral components isolated from Chinese medicines such as baicalein and kurarinone etc., antiviral Chinese medicine and its extract such as Scutellaria baicalensis and Forsythia suspensa etc., and antiviral Chinese patent medicine and its extract with examples.
IT **491-67-8**, Baicalein
RL: **PAC (Pharmacological activity)**; **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(research Advances in antiviral Chinese medicine)
RN 491-67-8 CAPLUS
CN 4H-1-Benzopyran-4-one, 5,6,7-trihydroxy-2-phenyl- (9CI) (CA INDEX NAME)

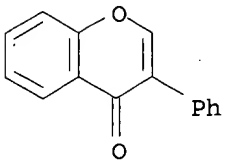


L34 ANSWER 5 OF 31 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:678878 CAPLUS
DOCUMENT NUMBER: 141:150387
TITLE: Recent developments of apoptosis inducer
AUTHOR(S): Sha, Lei; Zhao, Bao-Xiang; Tan, Wei; Miao, Jun-Ying
CORPORATE SOURCE: Sch. Chem. Chem. Eng., Shandong Univ., Jinan, 250100, Peop. Rep. China
SOURCE: Youji Huaxue (2004), 24(8), 864-871
CODEN: YCHHDX; ISSN: 0253-2786
PUBLISHER: Kexue Chubanshe
DOCUMENT TYPE: Journal; **General Review**
LANGUAGE: Chinese
ED Entered STN: 20 Aug 2004
AB A review. The apoptosis inducers as anticancer reagents have attracted considerable attention, and now some of them have been used in clinic. They are the promising drugs toward, cancer treatment. This paper reviews the recent development of apoptosis inducer with an emphasis on their structures and their structure-activity relationship.
IT **491-67-8**, Baicalein
RL: **PAC (Pharmacological activity)**; **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(recent developments of apoptosis inducer)
RN 491-67-8 CAPLUS
CN 4H-1-Benzopyran-4-one, 5,6,7-trihydroxy-2-phenyl- (9CI) (CA INDEX NAME)

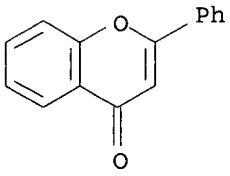


L34 ANSWER 6 OF 31 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:537222 CAPLUS
DOCUMENT NUMBER: 142:175885
TITLE: Periodontal diseases and systemic bone density-supplementation of calcium and soybean isoflavone
AUTHOR(S): Takemura, Akane
CORPORATE SOURCE: Preduct Development Dep., Sunstar Inc., Takatsuki, Osaka, 569-1195, Japan
SOURCE: Saibo (2004), 36(6), 241-243
CODEN: SAIBC7; ISSN: 1346-7557
PUBLISHER: Nyu Saiensusha
DOCUMENT TYPE: Journal; **General Review**
LANGUAGE: Japanese

ED Entered STN: 06 Jul 2004
AB A review discussing the effect of calcium and soybean isoflavone supplementation on periodontal disease based on clin. study with postmenopausal females is provided.
IT **574-12-9**, Isoflavone
RL: **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(effect of calcium and soybean isoflavone supplementation on periodontal diseases and systemic bone d.)
RN 574-12-9 CAPLUS
CN 4H-1-Benzopyran-4-one, 3-phenyl- (9CI) (CA INDEX NAME)

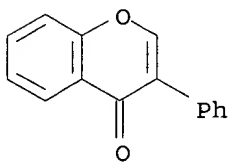


L34 ANSWER 7 OF 31 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:276947 CAPLUS
DOCUMENT NUMBER: 141:98776
TITLE: Progress in the therapy of liver fibrosis targeting to hepatic stellate cells
AUTHOR(S): Zhang, Xufu; Lu, Zhiping; Liu, Xiaoyan
CORPORATE SOURCE: Traditional Chinese Medicine Department, The First Military Medical University, Guangzhou, 510515, Peop. Rep. China
SOURCE: Zhongguo Yaolixue Tongbao (2003), 19(6), 622-626
CODEN: ZYTOE8; ISSN: 1001-1978
PUBLISHER: Anhui Yike Daxue Linchuan Yaoli Yanjiuso
DOCUMENT TYPE: Journal; **General Review**
LANGUAGE: Chinese
ED Entered STN: 05 Apr 2004
AB A review with 38 refs. on progress in the therapy of liver fibrosis targeting to hepatic stellate cells with subdivision headings: (1) inhibiting the activation and proliferation of hepatic stellate cells; (2) regulating the synthesis and degradation of collagen; (3) hepatic stellate cells-targeting therapy of liver fibrosis; (4) conclusion and expectation.
IT **38640-70-9**, Penta-hydroxyflavone
RL: **PAC (Pharmacological activity)**; **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(progress in therapy of liver fibrosis targeting to hepatic stellate cells)
RN 38640-70-9 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-phenyl-, pentahydroxy deriv. (9CI) (CA INDEX NAME)



5 (D1—OH)

L34 ANSWER 8 OF 31 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:207591 CAPLUS
DOCUMENT NUMBER: 141:313057
TITLE: Isoflavone and saponin in soybeans
AUTHOR(S): Kudo, Shigemitsu; Yuki, Yumiko; Okubo, Kazuyoshi
CORPORATE SOURCE: Society of Food Science and Technology, Japan, Japan
SOURCE: Shokuhin Kogyo ni Okeru Kagaku Gijutsu no Shinpo (2003), 10, 41-65
CODEN: SKOKBV
PUBLISHER: Korin
DOCUMENT TYPE: Journal; **General Review**
LANGUAGE: Japanese
ED Entered STN: 16 Mar 2004
AB A review discussing soybean isoflavone chemical structures, isoflavone concentration
in soybeans and processed food, metabolism in the human body, and physiol. activities, saponin in soybeans, and the concentration and metabolism thereof.
IT **574-12-9D**, Isoflavone, derivs.
RL: FFD (Food or feed use); **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(isoflavone and saponin in soybeans)
RN 574-12-9 CAPLUS
CN 4H-1-Benzopyran-4-one, 3-phenyl- (9CI) (CA INDEX NAME)



L34 ANSWER 9 OF 31 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:179435 CAPLUS
DOCUMENT NUMBER: 141:270740
TITLE: Herbal Modulation of P-Glycoprotein
AUTHOR(S): Zhou, Shufeng; Lim, Lee Yong; Chowbay, Balram
CORPORATE SOURCE: Faculty of Science, Department of Pharmacy, National University of Singapore, Singapore
SOURCE: Drug Metabolism Reviews (2004), 36(1), 57-104
CODEN: DMTRAR; ISSN: 0360-2532
PUBLISHER: Marcel Dekker, Inc.
DOCUMENT TYPE: Journal; **General Review**
LANGUAGE: English

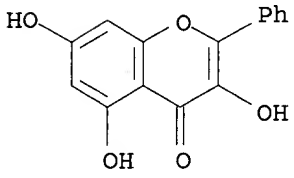
ED Entered STN: 05 Mar 2004

AB A review. P-glycoprotein (Pgp) is a 170 kDa phosphorylated glycoprotein encoded by human MDR1 gene. It is responsible for the systemic disposition of numerous structurally and pharmacol. unrelated lipophilic and amphipathic drugs, carcinogens, toxins, and other xenobiotics in many organs, such as the intestine, liver, kidney, and brain. Like cytochrome P450s (CYP3A4), Pgp is vulnerable to inhibition, activation, or induction by herbal constituents. This was demonstrated by using an ATPase assay, purified Pgp protein or intact Pgp-expressing cells, and proper probe substrates and inhibitors. Curcumin, ginsenosides, piperine, some catechins from green tea, and silymarin from milk thistle were found to be inhibitors of Pgp, while some catechins from green tea increased Pgp-mediated drug transport by heterotropic allosteric mechanism, and St. John's wort induced the intestinal expression of Pgp in vitro and in vivo. Some components (e.g., bergamottin and quercetin) from grapefruit juice were reported to modulate Pgp activity. Many of these herbal constituents, in particular flavonoids, were reported to modulate Pgp by directly interacting with the vicinal ATP-binding site, the steroid-binding site, or the substrate-binding site. Some herbal constituents (e.g., hyperforin and kava) were shown to activate pregnane X receptor, an orphan nuclear receptor acting as a key regulator of MDR1 and many other genes. The inhibition of Pgp by herbal constituents may provide a novel approach for reversing multidrug resistance in tumor cells, whereas the stimulation of Pgp expression or activity has implication for chemoprotective enhancement by herbal medicines. Certain natural flavonols (e.g., kaempferol, quercetin, and galangin) are potent stimulators of the Pgp-mediated efflux of 7,12-dimethylbenz(a)-anthracene (a carcinogen). The modulation of Pgp activity and expression by these herb constituents may result in altered absorption and bioavailability of drugs that are Pgp substrates. This is exemplified by increased oral bioavailability of phenytoin and rifampin by piperine and decreased bioavailability of indinavir, tacrolimus, cyclosporine, digoxin, and fexofenadine by coadministered St. John's wort. However, many of these drugs are also substrates of CYP3A4. Thus, the modulation of intestinal Pgp and CYP3A4 represents an important mechanism for many clin. important herb-drug interactions. Further studies are needed to explore the relative role of Pgp and CYP3A4 modulation by herbs and the mechanism for the interplay of these two important proteins in herb-drug interactions.

IT **548-83-4**, Galangin
RL: **PAC (Pharmacological activity)**; **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(natural flavonol galangin is potent stimulator of Pgp-mediated efflux of carcinogen 7,12-dimethylbenz(a)-anthracene)

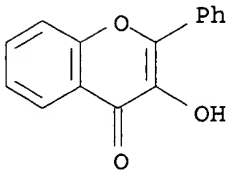
RN 548-83-4 CAPLUS

CN 4H-1-Benzopyran-4-one, 3,5,7-trihydroxy-2-phenyl- (9CI) (CA INDEX NAME)



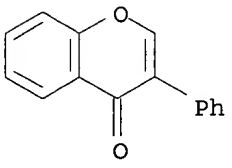
IT **577-85-5**, Flavonol
RL: **PAC (Pharmacological activity)**; **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(natural flavonols kaempferol, quercetin and galangin are potent stimulators of Pgp-mediated efflux of carcinogen 7,12-dimethylbenz(a)-

anthracene)
RN 577-85-5 CAPLUS
CN 4H-1-Benzopyran-4-one, 3-hydroxy-2-phenyl- (9CI) (CA INDEX NAME)



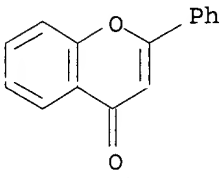
REFERENCE COUNT: 336 THERE ARE 336 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L34 ANSWER 10 OF 31 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:81079 CAPLUS
DOCUMENT NUMBER: 141:218071
TITLE: Phytoestrogens. The role of isoflavones
AUTHOR(S): Dragomirescu, Anca; Antal, Diana; Dehelean, Cristina
CORPORATE SOURCE: Fac. de Farm. Timisoara, UMFT, Timisoara, 1900, Rom.
SOURCE: Farmacia (Bucharest, Romania) (2003), 51(6), 15-24
CODEN: FRMBAZ; ISSN: 0014-8237
PUBLISHER: Societatea de Stiinte Farmaceutice din Romania
DOCUMENT TYPE: Journal; **General Review**
LANGUAGE: Romanian
ED Entered STN: 02 Feb 2004
AB A review with refs. Phytoestrogens are substances of vegetable origin: isoflavones, lignans, sterols synthesized by plants acting as fungicides or hormone regulators and which action is estrogen-like action.
IT **574-12-9**, Isoflavone
RL: NPO (Natural product occurrence); **PAC (Pharmacological activity)**; **THU (Therapeutic use)**; BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(phytoestrogens)
RN 574-12-9 CAPLUS
CN 4H-1-Benzopyran-4-one, 3-phenyl- (9CI) (CA INDEX NAME)



L34 ANSWER 11 OF 31 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:62124 CAPLUS
DOCUMENT NUMBER: 141:154
TITLE: Relation between structure and antioxidant activity of flavonoid
AUTHOR(S): Chen, Qi; Wang, Bo-chu; Tang, Chun-hong; Duan, Chuan-ren
CORPORATE SOURCE: Key Laboratory for Biomechanics & Tissue Engineering under State Ministry of Education, College of Bioengineering, Chongqing University, Chongqing,

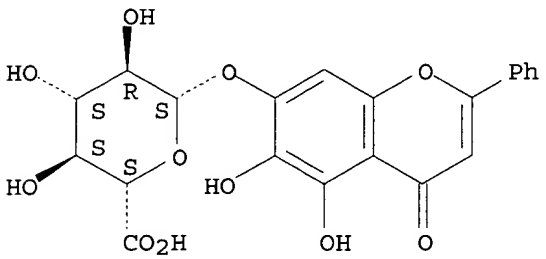
400044, Peop. Rep. China
SOURCE: Chongqing Daxue Xuebao, Ziran Kexueban (2003), 26(11), 48-51, 55
CODEN: CDXZF2; ISSN: 1000-582X
PUBLISHER: Chongqing Daxue Xuebao Bianjibu
DOCUMENT TYPE: Journal; **General Review**
LANGUAGE: Chinese
ED Entered STN: 26 Jan 2004
AB A review. A great many plants contain the monomer of flavonoids. These components have more than one hydroxy radical (R · OH), and provided with antioxidant effect of hydrogen radical (H ·), can scavenge the superoxide anions (O2.-), hydroxy free radical (OH ·) and other free radical activity. The relation between structure and antioxygenic activity of flavonoid is consanguineous. The structure-antioxidn. relationship of typical flavonoid antioxidants is described from three aspects. The amount of phenol hydroxyl, the locations of phenol hydroxyl and the different, substitute of phenol hydroxyl, it has been anticipated that some new flavonoid drugs with high efficacy and strong specificity will be discovered and developed and applied.
IT **525-82-6**, Flavone
RL: **DMA (Drug mechanism of action)**; **PAC (Pharmacological activity)**; **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(relation between structure and antioxidant activity of flavonoid)
RN 525-82-6 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-phenyl- (9CI) (CA INDEX NAME)



L34 ANSWER 12 OF 31 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:1011914 CAPLUS
DOCUMENT NUMBER: 141:93
TITLE: Advances in modulation of cytochrome P-450 by Chinese herbal medicine
AUTHOR(S): Wang, Yuguang; Gao, Yue
CORPORATE SOURCE: Institute of Radiation Medicine, Academy of Military Medical Sciences, Beijing, 100850, Peop. Rep. China
SOURCE: Zhongcaoyao (2003), 34(5), 477-478, s1
CODEN: CTYAD8; ISSN: 0253-2670
PUBLISHER: Zhongcaoyao Zazhi Bianjibu
DOCUMENT TYPE: Journal; **General Review**
LANGUAGE: Chinese
ED Entered STN: 30 Dec 2003
AB A review with 19 refs. on advances in modulation of cytochrome P 450 by Chinese herbal medicine with subdivision headings: (1) study on the regulatory effects of various kinds of compds. in Chinese medicine on the activity of cytochrome P 450; (2)study on the regulatory effects of Chinese medicine on the activity of cytochrome P 450; (3) study on the regulatory effects of Chinese patent medicine on the activity of cytochrome P 450; (4) methods for studying the regulatory effects of Chinese medicine; and (5) conclusion.
IT **21967-41-9**, Baicalin

RL: **PAC (Pharmacological activity)**; **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(advances in modulation of cytochrome P 450 by Chinese herbal medicine)
RN 21967-41-9 CAPLUS
CN β-D-Glucopyranosiduronic acid, 5,6-dihydroxy-4-oxo-2-phenyl-4H-1-benzopyran-7-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.

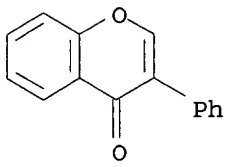


L34 ANSWER 13 OF 31 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:932226 CAPLUS
DOCUMENT NUMBER: 140:298665
TITLE: Anti-dipsotropic isoflavones: the potential therapeutic agents for alcohol dependence
AUTHOR(S): Keung, Wing Ming
CORPORATE SOURCE: Department of Psychiatry, Massachusetts Mental Health Center, and Center for Biochemical and Biophysical Sciences and Medicine, Harvard Medical School, Cambridge, MA, 02139, USA
SOURCE: Medicinal Research Reviews (2003), 23(6), 669-696
CODEN: MRREDD; ISSN: 0198-6325
PUBLISHER: John Wiley & Sons, Inc.
DOCUMENT TYPE: Journal; **General Review**
LANGUAGE: English
ED Entered STN: 30 Nov 2003
AB A review on the anti-dipsotropic isoflavones: the potential therapeutic agents for alc. dependence. Daidzin is the active principle of Radix puerariae (RP), an herbal remedy that has been used apparently safely and effectively for the treatment of "alc. addiction" in China for more than a millennium. It has been shown to reduce alc. consumption in all animal models tested to date. A link between daidzin's capacity to reduce alc. consumption and its ability to increase liver mitochondrial monoamine oxidase (MAO): aldehyde dehydrogenase (ALDH-2) activity ratio has been established. Daidzin analogs that potently inhibit ALDH-2 but not MAO are the most antidipsotropic, whereas those that also inhibit MAO are not. On the basis of these findings, it was proposed that the liver mitochondrial MAO-ALDH-2 pathway is the primary site of action of daidzin and that a biogenic aldehyde derived from the action of MAO mediates its anti-dipsotropic action. Therefore, to design and synthesize more potent anti-dipsotropic analogs, structural features that would enhance ALDH-2 inhibition and/or decrease MAO inhibition needed to be evaluated. Structure-activity-relationship (SAR) studies have revealed that a sufficient set of criteria for a potent anti-dipsotropic analog is an isoflavone with a free 4'-OH function and a straight-chain alkyl at the 7 position that has a terminal polar function such as -OH, -COOH, or -NH2. The preferable chain lengths for the 7-O-o-carboxy, 7-O-o-hydroxy, and 7-O-o-amino substituents are $5 \leq n \leq 10$, $2 \leq n \leq 6$, and $n \geq 4$, resp. Analogs that meet these criteria have

increased potency for ALDH-2 inhibition and/or decreased potency for MAO inhibition and are, therefore, likely to be potent anti-dipsotropic agents.

IT **574-12-9**, Isoflavone
RL: BSU (Biological study, unclassified); **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(anti-dipsotropic isoflavones and potential therapeutic agents for alc. dependence)

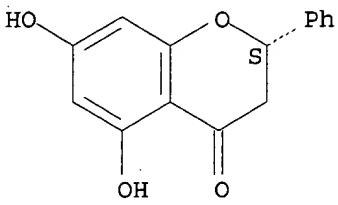
RN 574-12-9 CAPLUS
CN 4H-1-Benzopyran-4-one, 3-phenyl- (9CI) (CA INDEX NAME)



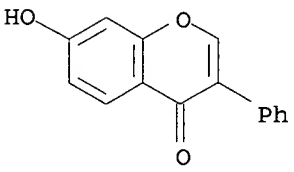
REFERENCE COUNT: 88 THERE ARE 88 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L34 ANSWER 14 OF 31 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:724209 CAPLUS
DOCUMENT NUMBER: 140:300380
TITLE: Advances in studies on chemical constituents and physiological activity of Goniothalamus (Bl.) Hook. f. et Thoms.
AUTHOR(S): Wang, Qizhi; He, Mingfang; Liang, Jingyu
CORPORATE SOURCE: Department of Phytochemistry, China Pharmaceutical University, Nanjing, 210009, Peop. Rep. China
SOURCE: Zhongcaoyao (2003), 34(3), 277-280
CODEN: CTYAD8; ISSN: 0253-2670
PUBLISHER: Zhongcaoyao Zazhi Bianjibu
DOCUMENT TYPE: Journal; **General Review**
LANGUAGE: Chinese
ED Entered STN: 16 Sep 2003
AB A review of advances in studies on the chemical constituents and physiol. activity of Goniothalamus.
IT **480-39-7**, Pinocembrin
RL: BSU (Biological study, unclassified); **PAC (Pharmacological activity)**; **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(chemical constituents and antitumor activity of Goniothalamus)
RN 480-39-7 CAPLUS
CN 4H-1-Benzopyran-4-one, 2,3-dihydro-5,7-dihydroxy-2-phenyl-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L34 ANSWER 15 OF 31 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:674346 CAPLUS
DOCUMENT NUMBER: 140:305682
TITLE: Progress on synthesis of 7-hydroxyisoflavone for antiosteoporosis pharmaceuticals
AUTHOR(S): Fu, Chun; Shen, Zhangping; Xiao, Guomin
CORPORATE SOURCE: Nanjing Chemical Plant, China Petrochemical Corp., Nanjing, Peop. Rep. China
SOURCE: Jingxi Yu Zhuanyong Huaxuepin (2003), 11(15), 12-16
CODEN: JYZHA7; ISSN: 1008-1100
PUBLISHER: Jingxi Yu Zhuanyong Huaxuepin Bianjibu
DOCUMENT TYPE: Journal; **General Review**
LANGUAGE: Chinese
ED Entered STN: 29 Aug 2003
AB A review covering synthetic methods and development progress of 7-hydroxyisoflavone, a key intermediate for the manufacture of newly developed antiosteoporosis drugs. The advantages and disadvantages of the synthetic methods are discussed and it is pointed out that cyclocondensation of tri-Et orthoformate with 2,4-dihydroxyphenyl benzyl ketone prepared from resorcinol and PhCH2CO2H is an appropriate technol. for com. production of 7-hydroxyisoflavone.
IT **13057-72-2P**, 7-Hydroxyisoflavone
RL: IMF (Industrial manufacture); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)
(progress on synthesis of hydroxyisoflavone for antiosteoporosis pharmaceuticals)
RN 13057-72-2 CAPLUS
CN 4H-1-Benzopyran-4-one, 7-hydroxy-3-phenyl- (9CI) (CA INDEX NAME)



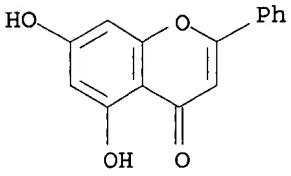
L34 ANSWER 16 OF 31 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:519783 CAPLUS
DOCUMENT NUMBER: 138:82738
TITLE: GABAA-receptor ligands of flavonoid structure
AUTHOR(S): Marder, Mariel; Paladini, Alejandro C.
CORPORATE SOURCE: Instituto de Quimica y Fisicoquimica Biologicas, Facultad de Farmacia y Bioquimica, Buenos Aires, 1113, Argent.
SOURCE: Current Topics in Medicinal Chemistry (Hilversum, Netherlands) (2002), 2(8), 853-867
CODEN: CTMCCL; ISSN: 1568-0266
PUBLISHER: Bentham Science Publishers Ltd.
DOCUMENT TYPE: Journal; **General Review**
LANGUAGE: English
ED Entered STN: 12 Jul 2002
AB A review describes the new research developments that have established the CNS-activity of some natural flavonoids. The properties of flavone, chrysin, apigenin and cirsiliol are described and a survey of the occurrence of ligands for the benzodiazepine binding site in the flavonoid field is attempted. Natural compds., structurally related to flavonoids

and with similar CNS-activities, are also included. A medicinal chemical approach to improve the biochem. and pharmacol. properties of the flavone nucleus is described alongside with the enumeration of the principal achievements obtained to date. Quant. structure-activity relationships studies leading to the formulation of pharmacophore models presumably describing the characteristics of the flavone-binding site in the GABAA-receptor are summarized.

IT **480-40-0**, Chrysin
RL: **PAC (Pharmacological activity)**; **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(GABAA-receptor ligands of flavonoid structure)

RN 480-40-0 CAPLUS

CN 4H-1-Benzopyran-4-one, 5,7-dihydroxy-2-phenyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 87 THERE ARE 87 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L34 ANSWER 17 OF 31 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:175181 CAPLUS

DOCUMENT NUMBER: 136:334614

TITLE: Effects of Saiboku-to (Chai-Pu-Tang) components, which are absorbed into the body following the administration, on the release of leukotrienes

AUTHOR(S): Honma, Masato; Oka, Kitaro; Niitsuma, Tomoyuki; Hayashi, Toru

CORPORATE SOURCE: Department of Pharmaceutical Science, Institute of Clinical Medicine, University of Tsukuba, Ibaraki, Japan

SOURCE: Kanpo to Men'eki, Arerugi (2001), 15, 38-46
CODEN: KMARED; ISSN: 0914-6407

PUBLISHER: Fama Intanashonaru

DOCUMENT TYPE: Journal; **General Review**

LANGUAGE: Japanese

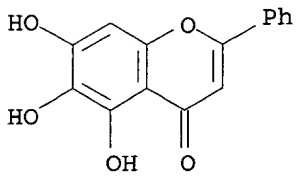
ED Entered STN: 12 Mar 2002

AB A review. To investigate the anti-allergic activities of the components, which are absorbed into the body when Saiboku-to (Chai-Pu-Tang) is administered, we studied the inhibitory effects on the release of leukotrienes (LTs) from human polymorphonuclear leukocytes (PMLs). The inhibitory effects for each compound were evaluated by a concentration (IC50) that suppresses 50% the release of LTB4 and LTC4 from PMLs stimulated by calcium ionophores. The inhibition activities for davidigenin, medicarpin, and dihydroxydihydromagnolol were equal to that for the pos. control azelastine hydrochloride. Baicalein and magnolol demonstrated stronger activity compared with azelastine hydrochloride. Liquiritigenin did not inhibit the LT-release but davidigenin, a bacterial metabolite of liquiritigenin in the intestine, did. This observation lead to the assumption that liquiritigenin plays a part in inhibiting release of LTs through metabolic conversion to active davidigenin in the intestinal bacterial flora. Active compds. took from 1 to 3, from 6 to 9, or 12 h to reach maximum concentration in the blood after single dose of Saiboku-to. The

compds. related to inhibition of LT release changed time-dependently after administration of Saiboku-to. LT-release inhibition by baicalein and magnolol was stronger in the PMLs of bronchial-asthmatics than in those of healthy subjects.

IT **491-67-8**, Baicalein
RL: **PAC (Pharmacological activity)**; **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(effects of Saiboku-to (Chai-Pu-Tang) components, which are absorbed into the body following the administration, on the release of leukotrienes)

RN 491-67-8 CAPLUS
CN 4H-1-Benzopyran-4-one, 5,6,7-trihydroxy-2-phenyl- (9CI) (CA INDEX NAME)

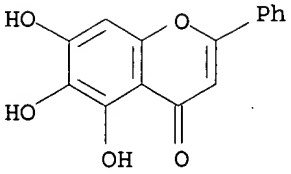


L34 ANSWER 18 OF 31 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:175180 CAPLUS
DOCUMENT NUMBER: 136:334613
TITLE: Inhibition effects of oriental medicine on production of macrophage-derived chemokines(MDC)
AUTHOR(S): Hirai, Koichi; Nakajima, Toshiharu; Cyong, Jong-Chol
CORPORATE SOURCE: Department of Bioregulatory Function, University of Tokyo Graduate School of Medicine, Tokyo, Japan
SOURCE: Kanpo to Men'eki, Arerugi (2001), 15, 28-37
CODEN: KMARED; ISSN: 0914-6407
PUBLISHER: Fama Intanashonaru
DOCUMENT TYPE: Journal; **General Review**
LANGUAGE: Japanese
ED Entered STN: 12 Mar 2002

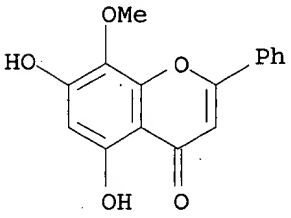
AB A review. The Th2-specific chemokine MDC is thought to be a target mol. for the treatment of bronchial asthma, which is Th2 dominant. Administration of Saiboku-to (Chai-Po-Tang) and Oren-gedoku-to (Huang-Lian-Jie-Du-Tang [500 μg/mL]) inhibited dominant production of MDC from human peripheral-blood mononuclear cell under IL-4 stimulation. Administration of 500 μg/mL of Oren (Huang-Qin) a component of Saiboku-to alone significantly inhibited MDC production Among the components of Ogon, baicalein and wogonin significantly inhibited MDC production Wogonin too was shown to have an inhibiting effect. PCR investigations showed that addition of 5 μg/mL of baicalein and 50 μg/mL of wogonin inhibited MDC mRNA expression. In addition, Oren and Obaku, both components of Oren-gedoku-to, inhibited MDC production Their principal component berberine also suppressed MDC generation.

IT **491-67-8**, Baicalein **632-85-9**, Wogonin
RL: **PAC (Pharmacological activity)**; **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(inhibition effects of oriental medicine on production of macrophage-derived chemokines)

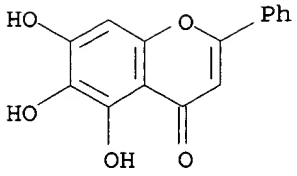
RN 491-67-8 CAPLUS
CN 4H-1-Benzopyran-4-one, 5,6,7-trihydroxy-2-phenyl- (9CI) (CA INDEX NAME)



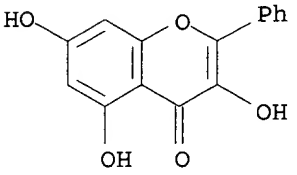
RN 632-85-9 CAPLUS
CN 4H-1-Benzopyran-4-one, 5,7-dihydroxy-8-methoxy-2-phenyl- (9CI) (CA INDEX NAME)



L34 ANSWER 19 OF 31 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:96964 CAPLUS
DOCUMENT NUMBER: 137:194759
TITLE: Review in pharmacological study of baicalein
AUTHOR(S): Zhang, Xiping; Li, Zongfang; Liu, Xiaogong
CORPORATE SOURCE: Second Hospital, Xi'an Jiaotong University, Xi'an, 710004, Peop. Rep. China
SOURCE: Zhongguo Yaolixue Tongbao (2001), 17(6), 711-713
CODEN: ZYTOE8; ISSN: 1001-1978
PUBLISHER: Anhui Yike Daxue Linchuan Yaoli Yanjiuso
DOCUMENT TYPE: Journal; **General Review**
LANGUAGE: Chinese
ED Entered STN: 06 Feb 2002
AB A review with 17 refs. on pharmacol. of baicalein with subdivision headings: (1) antibacterial and antiviral effects; (2) anti-inflammatory effect; (3) protective effect on liver and diuretic effect; (4) antioxidant and free radical scavenging effects; (5) anticoagulative and antithrombotic effects; (6) inhibitory effect of pancreatic enzyme activity; (7) effects on biol. membranes; (8) antitumor effects; (9) regulatory effects on smooth muscle; (10) antihypertensive effect; inhibitory effect on adhesion mol. expression and (12) summary.
IT **491-67-8**, Baicalein
RL: **PAC (Pharmacological activity)**; **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(pharmacol. of baicalein)
RN 491-67-8 CAPLUS
CN 4H-1-Benzopyran-4-one, 5,6,7-trihydroxy-2-phenyl- (9CI) (CA INDEX NAME)



L34 ANSWER 20 OF 31 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:333455 CAPLUS
DOCUMENT NUMBER: 135:131613
TITLE: Anti-genotoxicity of galangin as a cancer chemopreventive agent candidate
AUTHOR(S): Heo, M. Y.; Sohn, S. J.; Au, W. W.
CORPORATE SOURCE: College of Pharmacy, Kangwon National University, Chunchon, 200, S. Korea
SOURCE: Mutation Research (2001), 488(2), 135-150
CODEN: MUREAV; ISSN: 0027-5107
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal; **General Review**
LANGUAGE: English
ED Entered STN: 10 May 2001
AB A review with 132 refs. Flavonoids are polyphenolic compds. that are present in plants. They have been shown to possess a variety of biol. activities at non-toxic concns. in organisms. Galangin, a member of the flavonol class of flavonoid, is present in high concns. in medicinal plants (e.g. Alpinia officinarum) and propolis, a natural beehive product. Results from in vitro and in vivo studies indicate that galangin with anti-oxidative and free radical scavenging activities is capable of modulating enzyme activities and suppressing the genotoxicity of chems. These activities will be discussed in this review. Based on our review, galangin may be a promising candidate for cancer chemoprevention.
IT **548-83-4**, Galangin
RL: **BAC (Biological activity or effector, except adverse)**; BSU (Biological study, unclassified); **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(anti-genotoxicity of galangin as a cancer chemopreventive agent candidate)
RN 548-83-4 CAPLUS
CN 4H-1-Benzopyran-4-one, 3,5,7-trihydroxy-2-phenyl- (9CI) (CA INDEX NAME)

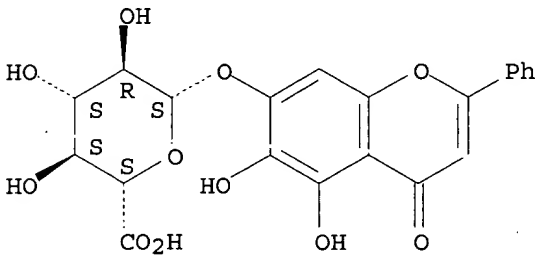


REFERENCE COUNT: 132 THERE ARE 132 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L34 ANSWER 21 OF 31 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:6771 CAPLUS
DOCUMENT NUMBER: 135:101688
TITLE: Pharmacological effects of baicalin

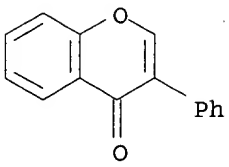
AUTHOR(S): Cui, Lan; Yuan, Jing; Wang, Pingquan
CORPORATE SOURCE: Department of Clinical Pharmacy and Pharmacology, Renji Hospital, Shanghai, Shanghai, 200001, Peop. Rep. China
SOURCE: Zhongguo Yiyuan Yaoxue Zazhi (2000), 20(11), 685-686
CODEN: ZYYAEP; ISSN: 1001-5213
PUBLISHER: Zhongguo Yiyuan Yaoxue Zazhi Bianjibu
DOCUMENT TYPE: Journal; **General Review**
LANGUAGE: Chinese
ED Entered STN: 04 Jan 2001
AB A review, with 18 refs., on the pharmacol. of baicalin: effect on Ca2+; scavenging of free radicals; inhibition of aldose reductase and use in treating chronic complications of diabetes; effect on psoriasis; anti-HIV-1 activity; antitumor effects; effects on cataracts; sunscreening activity.
IT **21967-41-9**, Baicalin
RL: **BAC (Biological activity or effector, except adverse)**; BSU (Biological study, unclassified); **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(pharmacol. of baicalin)
RN 21967-41-9 CAPLUS
CN β-D-Glucopyranosiduronic acid, 5,6-dihydroxy-4-oxo-2-phenyl-4H-1-benzopyran-7-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.

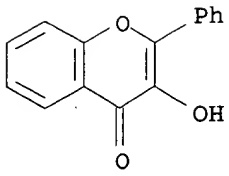


L34 ANSWER 22 OF 31 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2000:844208 CAPLUS
DOCUMENT NUMBER: 134:4292
TITLE: Application of isoflavone for beauty
AUTHOR(S): Kojima, Hiroyuki; Kawai, Norihisa
CORPORATE SOURCE: Res. Dev. Dep., Ichimaru Pharcos Co. Ltd., Gifu, 501-0475, Japan
SOURCE: Fragrance Journal (2000), 28(11), 111-115
CODEN: FUJAD7; ISSN: 0288-9803
PUBLISHER: Fureguransu Janaru Sha
DOCUMENT TYPE: Journal; **General Review**
LANGUAGE: Japanese
ED Entered STN: 05 Dec 2000
AB A review with 15 refs. on biosynthesis and structure of isoflavonoids which are contained in plant, especially in soybean. Physiol. activities of isoflavonoids such as female sex hormone-like activity, antimicrobial activity, etc., are also discussed.
IT **574-12-9**, Isoflavone
RL: **BAC (Biological activity or effector, except adverse)**; BSU (Biological study, unclassified); FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(application of isoflavone for beauty)

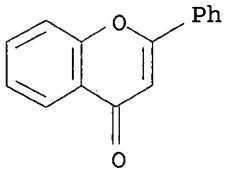
RN 574-12-9 CAPLUS
CN 4H-1-Benzopyran-4-one, 3-phenyl- (9CI) (CA INDEX NAME)



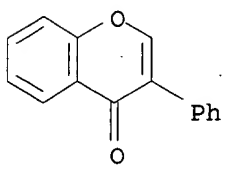
L34 ANSWER 23 OF 31 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1998:436176 CAPLUS
DOCUMENT NUMBER: 129:67146
TITLE: Flavonols, flavones, and anthocyanins as native antioxidants of food and their possible role in the prevention of chronic diseases
AUTHOR(S): Boehm, H.; Boeing, H.; Hempel, J.; Raab, B.; Kroke, A.
CORPORATE SOURCE: Deutsches Institut Ernaehrungsforschung, Bergholz-Rehbruecke, D-14558, Germany
SOURCE: Zeitschrift fuer Ernaehrungswissenschaft (1998), 37(2), 147-163
CODEN: ZERNAL; ISSN: 0044-264X
PUBLISHER: Dr. Dietrich Steinkopff Verlag GmbH & Co. KG
DOCUMENT TYPE: Journal; **General Review**
LANGUAGE: German
ED Entered STN: 15 Jul 1998
AB A review with many refs. on the current knowledge on the occurrence, intake, bioavailability, and antioxidative properties of flavonols, flavones, and anthocyanins as well as the assocns. between flavonol intake and disease risks. Flavonoids are non-nutritive compds. of plants with a considerable antioxidative activity, mainly based on scavenging of O radicals, and possible protective effects against chronic diseases. Flavonols and anthocyanins are commonly found in European fruits and vegetables. Black tea and red wine may have a high content of these compds. The mean intake of flavonols of the German population was calculated using data from the National German Food Consumption Survey. According to this anal., the daily, per capita intake was .apprx.11.5 mg flavonols, mainly derived from fruits and vegetables, but also from black tea and red wine. An inverse association between flavonol intake and mortality from myocardial infarction was observed by epidemiol. studies. The flavonoid intake can be inversely correlated with cancer risk. Possible health related effects especially of flavonols are critically reflected, and the necessity of further research is outlined.
IT **577-85-5**, Flavonol
RL: **BAC (Biological activity or effector, except adverse)**; BOC (Biological occurrence); BSU (Biological study, unclassified); FFD (Food or feed use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(flavonols, flavones, and anthocyanins as native antioxidants of food and their role in prevention of chronic diseases)
RN 577-85-5 CAPLUS
CN 4H-1-Benzopyran-4-one, 3-hydroxy-2-phenyl- (9CI) (CA INDEX NAME)



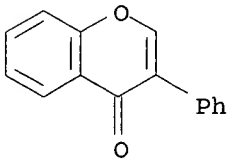
IT **525-82-6**, Flavone
RL: **BAC (Biological activity or effector, except adverse)**; BSU (Biological study, unclassified); FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(flavonols, flavones, and anthocyanins as native antioxidants of food and their role in prevention of chronic diseases)
RN 525-82-6 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-phenyl- (9CI) (CA INDEX NAME)



L34 ANSWER 24 OF 31 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1998:377444 CAPLUS
DOCUMENT NUMBER: 129:135489
TITLE: Health effects of non-nutrient factors in soy bean
AUTHOR(S): Watanabe, Shaw
CORPORATE SOURCE: Fac. Appl. Biol., Tokyo Agric. Univ., Japan
SOURCE: Food Style 21 (1998), 2(6), 29-32
CODEN: FSTYFF
PUBLISHER: Shokuhin Kagaku Shinbunsha
DOCUMENT TYPE: Journal; **General Review**
LANGUAGE: Japanese
ED Entered STN: 20 Jun 1998
AB A review with 13 refs. on application of nonnutritive soybean isoflavones on health.
IT **574-12-9**, Isoflavone
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); FFD (Food or feed use); **THU (Therapeutic use)**; BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(health effects of non-nutrient factors in soy bean)
RN 574-12-9 CAPLUS
CN 4H-1-Benzopyran-4-one, 3-phenyl- (9CI) (CA INDEX NAME)



L34 ANSWER 25 OF 31 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1998:332080 CAPLUS
DOCUMENT NUMBER: 129:94548
TITLE: Cancer suppressing effects of soybean isoflavone derivatives of food
AUTHOR(S): Tsuzaki, Shinichi
CORPORATE SOURCE: Fuji Oil Co., Ltd., Japan
SOURCE: New Food Industry (1998), 40(4), 59-64
CODEN: NYFIAM; ISSN: 0547-0277
PUBLISHER: Shokuhin Shizai Kenkyukai
DOCUMENT TYPE: Journal; **General Review**
LANGUAGE: Japanese
ED Entered STN: 04 Jun 1998
AB A review with 26 refs.
IT **574-12-9D**, Isoflavone, derivs.
RL: **BAC (Biological activity or effector, except adverse)**; BSU (Biological study, unclassified); FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(cancer suppressing effects of soybean isoflavone derivs. of food)
RN 574-12-9 CAPLUS
CN 4H-1-Benzopyran-4-one, 3-phenyl- (9CI) (CA INDEX NAME)

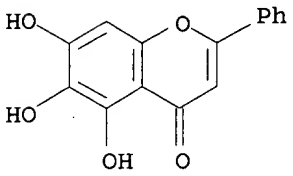


L34 ANSWER 26 OF 31 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1998:20738 CAPLUS
DOCUMENT NUMBER: 128:135952
TITLE: Anticancer properties of flavonoids, with emphasis on citrus flavonoids
AUTHOR(S): Carroll, Kenneth K.; Guthrie, Najla; So, Felicia V.; Chambers, Ann F.
CORPORATE SOURCE: The University of Western Ontario, London, ON, Can.
SOURCE: Antioxidants in Health and Disease (1998), 7(Flavonoids in Health and Disease), 437-446
CODEN: AHDIEQ
PUBLISHER: Marcel Dekker, Inc.
DOCUMENT TYPE: Journal; **General Review**
LANGUAGE: English
ED Entered STN: 15 Jan 1998
AB A review, with 19 refs. Orange juice given to rats in place of drinking water appeared to delay the development of mammary tumors induced by DMBA. The rats given orange juice grew better than controls, indicating that the inhibition of tumorigenesis was not simply an effect of general growth inhibition. Flavonoids, including those present in citrus juices, were shown to inhibit proliferation of both estrogen receptor-neg. and -pos. human breast cancer cells in culture. The most effective compds. tested were nobiletin and tangeretin from tangerines. With the exception of genistein, the flavonoids used in these expts. do not appear to be acting as antiastrogens. Their ability to inhibit protein kinase C suggests that they interfere with signal transduction pathways in these human breast cancer cells. The flavonoids were found to act synergistically with tocotrienols (a form of vitamin E) and with tamoxifen in the inhibition of

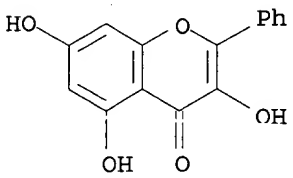
both the estrogen receptor-neg. and -pos. cancer cells. This may be because they are inhibiting proliferation of the cells by different mechanisms. Eating a mixture of foods containing these different compds. may thus help to prevent cancer and may potentiate the action of established anticancer agents such as tamoxifen.

IT **491-67-8**, Baicalein **548-83-4**, Galangin
RL: **BAC (Biological activity or effector, except adverse)**; BSU (Biological study, unclassified); **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(anticancer properties of flavonoids, with emphasis on citrus flavonoids)

RN 491-67-8 CAPLUS
CN 4H-1-Benzopyran-4-one, 5,6,7-trihydroxy-2-phenyl- (9CI) (CA INDEX NAME)



RN 548-83-4 CAPLUS
CN 4H-1-Benzopyran-4-one, 3,5,7-trihydroxy-2-phenyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

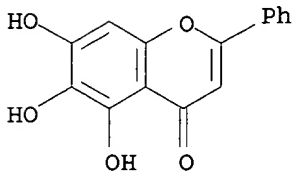
L34 ANSWER 27 OF 31 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1997:658938 CAPLUS
DOCUMENT NUMBER: 127:314297
TITLE: Food, medicinal plants and active oxygen metabolism
AUTHOR(S): Okuda, Hiromichi
CORPORATE SOURCE: Department Biochemistry II, Ehime University School Medicine, Japan
SOURCE: Furi Rajikaru no Rinsho (1996), 10, 13-18
CODEN: FRRIFI
PUBLISHER: Nihon Igakukan
DOCUMENT TYPE: Journal; **General Review**
LANGUAGE: Japanese
ED Entered STN: 17 Oct 1997
AB A review and discussion with 8 refs., mainly to the author's own research. Since ancient times, the roots of Scutellaria baicalensis have been used to treat allergic and inflammatory diseases in China and Japan. Baicalein isolated from this medicinal plant was found to inhibit 5- and 12-lipoxygenases. In addition, various coumarins, especially esculetin also inhibited these lipoxygenases. Recently, the author and coworkers isolated the novel compound Arg-Fru-Glc from Korean red ginseng. In the small intestine, Arg-Fru-Glc was metabolized to Arg-Fru which was then absorbed. It was clarified that the absorbed Arg-Fru caused dilatation of

blood vessels possibly through production of NO.

IT **491-67-8**, Baicalein
RL: **BAC (Biological activity or effector, except adverse)**; BSU (Biological study, unclassified); BIOL (Biological study)
(lipoxygenase inhibition by medicinal plant component)

RN 491-67-8 CAPLUS

CN 4H-1-Benzopyran-4-one, 5,6,7-trihydroxy-2-phenyl- (9CI) (CA INDEX NAME)



L34 ANSWER 28 OF 31 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1994:265711 CAPLUS

DOCUMENT NUMBER: 120:265711

TITLE: The evaluation of antibacterial and antifungal activities of dihydrotectochrysin and the volatile oil isolated from Kaempferia pandurata Roxb rhizomes using agar diffusion and cross streak methods

AUTHOR(S): Widianto, Mathilda; Sukandar, Elin Yulinah

CORPORATE SOURCE: Dep. Pharm., Bandung Inst. Technol., Bandung, Indonesia

SOURCE: Asahi Garasu Zaidan Josei Kenkyu Seika Hokoku (1993) 275-80
CODEN: AGSHEN; ISSN: 0919-9179

DOCUMENT TYPE: Journal; **General Review**

LANGUAGE: English

ED Entered STN: 28 May 1994

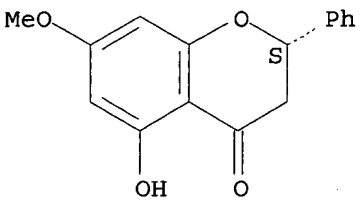
AB A review with 8 refs. Dihydrotectochrysin exhibited slight antimicrobial activity, whereas the volatile oil of K. pandurata showed a broad spectrum of activity against both bacteria and fungi. The volatile oil exhibits a MIC of 0.8% (1:131 dilution) against Bacillus subtilis and Pseudomonas pyogenes, and the activity of 10 μL of volatile oil was equivalent to 139.7 μg of chloramphenicol against B. subtilis and 783.97 μg of nystatin against Candida albicans.

IT **480-37-5**, Dihydrotectochrysin
RL: **BAC (Biological activity or effector, except adverse)**; BSU (Biological study, unclassified); BIOL (Biological study)
(from Kaempferia pandurata, antimicrobial activity of)

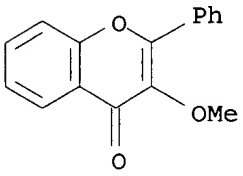
RN 480-37-5 CAPLUS

CN 4H-1-Benzopyran-4-one, 2,3-dihydro-5-hydroxy-7-methoxy-2-phenyl-, (2S)- (9CI) (CA INDEX NAME)

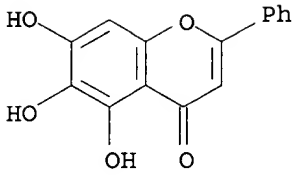
Absolute stereochemistry. Rotation (-).



L34 ANSWER 29 OF 31 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1994:94486 CAPLUS
DOCUMENT NUMBER: 120:94486
TITLE: Antiviral agents from higher plants and example of structure-activity relationship of 3-methoxyflavones
AUTHOR(S): Vanden Berghe, Dirk A. R.; Haemers, Achiel; Vlietinck, Arnold J.
CORPORATE SOURCE: Dep. Med., Univ. Antwerp, Antwerp, Belg.
SOURCE: Bioact. Nat. Prod. (1993), 405-40. Editor(s): Colegate, Steven M.; Molyneux, Russell J. CRC: Boca Raton, Fla.
CODEN: 59QSAO
DOCUMENT TYPE: Conference; **General Review**
LANGUAGE: English
ED Entered STN: 05 Mar 1994
AB A review with 136 refs., with particular emphasis on 3-methoxyflavones.
IT **7245-02-5D**, 3-Methoxyflavone, derivs.
RL: **BAC (Biological activity or effector, except adverse)**; BSU (Biological study, unclassified); BIOL (Biological study)
(virucides, from higher plants, structure-activity relations of)
RN 7245-02-5 CAPLUS
CN 4H-1-Benzopyran-4-one, 3-methoxy-2-phenyl- (9CI) (CA INDEX NAME)

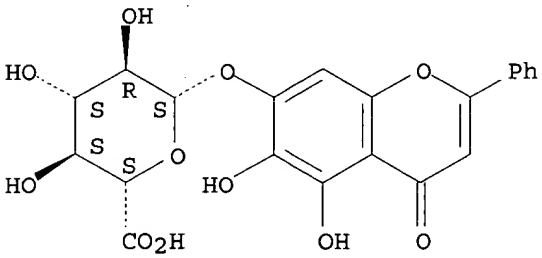


L34 ANSWER 30 OF 31 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1975:80163 CAPLUS
DOCUMENT NUMBER: 82:80163
TITLE: Pharmacological actions of baicalin and baicalein from Scutellariae radix
AUTHOR(S): Koda, Akihide
CORPORATE SOURCE: Gifu Coll. Pharm., Gifu, Japan
SOURCE: Taisha (1973), 10(5), 730-9
CODEN: TSHAAW; ISSN: 0372-1566
DOCUMENT TYPE: Journal; **General Review**
LANGUAGE: Japanese
ED Entered STN: 12 May 1984
AB A review with 36 refs., showing that baicalin [**21967-41-9**] and baicalein [**491-67-8**], constituents of Scutellariae radix and analogous in structure to disodium cromoglycate, inhibit allergic reactions by preventing mediator release from mast cell, the compds. do not influence antibody formation, antigen-antibody interaction, or the complement system. The mechanism of prevention might be an inhibition of SH enzymes.
IT **491-67-8 21967-41-9**
RL: **BAC (Biological activity or effector, except adverse)**; BSU (Biological study, unclassified); **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(pharmacol. of)
RN 491-67-8 CAPLUS
CN 4H-1-Benzopyran-4-one, 5,6,7-trihydroxy-2-phenyl- (9CI) (CA INDEX NAME)

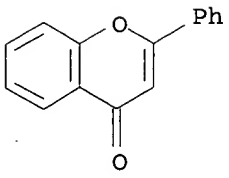


RN 21967-41-9 CAPLUS
CN β-D-Glucopyranosiduronic acid, 5,6-dihydroxy-4-oxo-2-phenyl-4H-1-benzopyran-7-yl (9CI) (CA INDEX NAME)

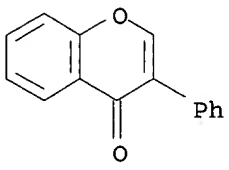
Absolute stereochemistry.



L34 ANSWER 31 OF 31 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1968:77167 CAPLUS
DOCUMENT NUMBER: 68:77167
TITLE: Insecticidal activity of pyrones
AUTHOR(S): Anjaneyulu, A. S. R.; Row, L. Ramachandra
CORPORATE SOURCE: Andhra Univ., Waltair, India
SOURCE: Symp. Syn. Heterocycl. Compounds Physiol. Interest, Hyderabad, India, 1964 (1966), Meeting Date 1964, 47-57
CODEN: 16VOA6
DOCUMENT TYPE: Conference
LANGUAGE: English
ED Entered STN: 12 May 1984
AB A review with 34 references. The toxicity of plant derived insecticides, such as rotenoids, coumarins, flavones, isoflavones, and pyrones, is tested against the freshwater fish, Haplochilus panchax. Flavones and isoflavones are inherently toxic to fish; a methyl or allyl ether group at C-7 and a veratroyl group in the side phenyl enhance their toxicity. The toxicity of rotenone is apparently attributable to its γ-pyranone structure and its steric configuration.
IT **525-82-6D**, Flavone, derivs. **574-12-9D**, Isoflavone, derivs.
RL: AGR (Agricultural use); **BAC (Biological activity or effector, except adverse)**; BSU (Biological study, unclassified); BIOL (Biological study); USES (Uses)
(insecticidal activity of, structure in relation to)
RN 525-82-6 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-phenyl- (9CI) (CA INDEX NAME)



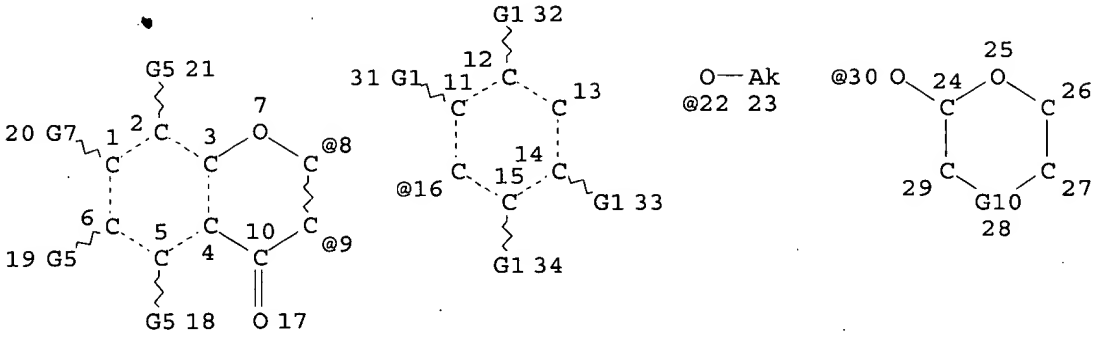
RN 574-12-9 CAPLUS
CN 4H-1-Benzopyran-4-one, 3-phenyl- (9CI) (CA INDEX NAME)



FILE 'HOME' ENTERED AT 15:47:47 ON 14 JUL 2005

=>

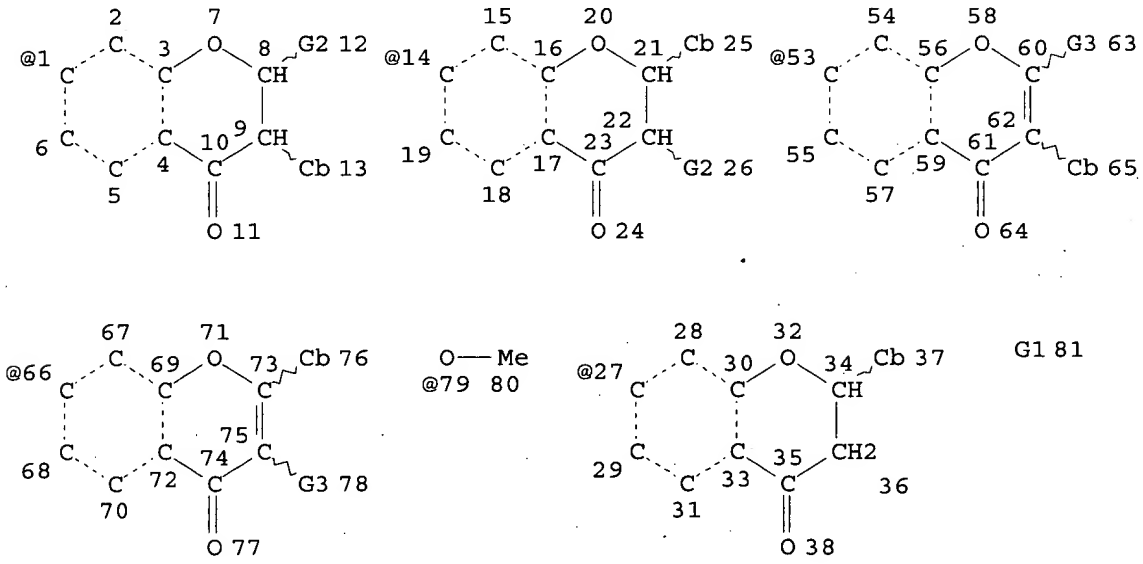
=> d stat que l22; d his full
L8 STR

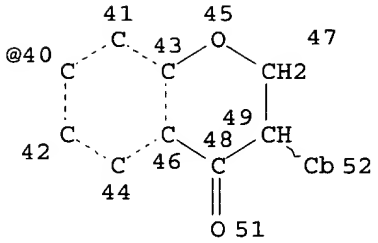


VAR G1=H/OH/22
VAR G5=H/OH/22
VAR G7=H/OH/22/30
REP G10=(0-1) C
VPA 16-8/9 U
NODE ATTRIBUTES:
CONNECT IS E1 RC AT 23
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 34

STEREO ATTRIBUTES: NONE
L10 15296 SEA FILE=REGISTRY SSS FUL L8
L17 STR

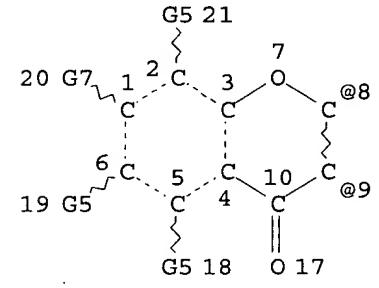


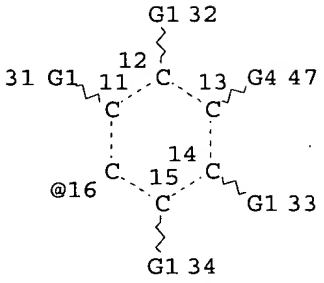


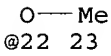
Page 2-A
VAR G1=1/14/53/66/27/40
VAR G2=OH/79
VAR G3=H/OH/79
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

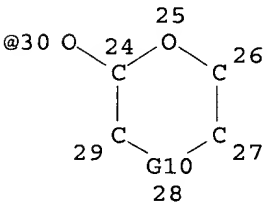
GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 79

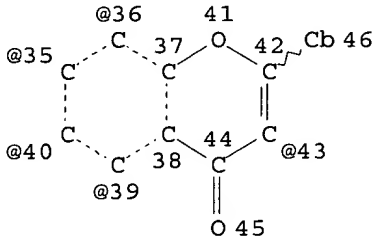
STEREO ATTRIBUTES: NONE
L20 STR











VAR G1=H/OH/22
VAR G4=H/35/36/40/39/43
VAR G5=H/OH/22
VAR G7=H/OH/22/30
REP G10=(0-1) C
VPA 16-8/9 U
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
GGCAT IS MCY LOC UNS AT 46

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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  47

STEREO ATTRIBUTES: NONE
L22        1370 SEA FILE=REGISTRY SUB=L10 SSS FUL (L17 AND L20)

100.0% PROCESSED   15296 ITERATIONS                          1370 ANSWERS
SEARCH TIME: 00.00.01



     (FILE 'HOME' ENTERED AT 14:42:21 ON 14 JUL 2005)

     FILE 'REGISTRY' ENTERED AT 14:42:25 ON 14 JUL 2005
L1                STR
L2             50 SEA SSS SAM L1

     FILE 'STNGUIDE' ENTERED AT 14:44:15 ON 14 JUL 2005

     FILE 'REGISTRY' ENTERED AT 14:45:08 ON 14 JUL 2005
L3          15416 SEA SSS FUL L1
                  SAVE TEMP L3 KHA306FULL/A

     FILE 'CAPLUS' ENTERED AT 14:52:35 ON 14 JUL 2005
                  SET LINE 250
                  SET DETAIL OFF
                  E US2001-782306/AP,PRN 25
                  SET NOTICE 1000 SEARCH
L4                1 SEA ABB=ON  US2001-782306/AP
                  SET NOTICE LOGIN SEARCH
                  SET LINE LOGIN
                  SET DETAIL LOGIN
                  D SCAN
                  SEL RN

     FILE 'REGISTRY' ENTERED AT 14:53:23 ON 14 JUL 2005
L5               17 SEA ABB=ON  (14259-47-3/BI OR 329900-75-6/BI OR 481-53-8/BI OR
                    486-66-8/BI OR 487-26-3/BI OR 491-54-3/BI OR 491-67-8/BI OR
                    491-70-3/BI OR 491-80-5/BI OR 520-26-3/BI OR 520-27-4/BI OR
                    520-33-2/BI OR 525-82-6/BI OR 528-48-3/BI OR 529-44-2/BI OR
                    529-59-9/BI OR 577-85-5/BI)
                  D SCAN
L6                STR L1
L7               50 SEA SSS SAM L6
L8                STR L6
L9               50 SEA SSS SAM L8
L10           15296 SEA SSS FUL L8
                  SAVE TEMP L10 KHA306FULL/A
L11               STR
L12              50 SEA SUB=L10 SSS SAM L11
                  E FLAVONE/CN

     FILE 'LREGISTRY' ENTERED AT 15:15:35 ON 14 JUL 2005
                  E FLAVONE/CN
L13               1 SEA ABB=ON  FLAVONE/CN
```

```
                D SCAN
                E 5-HYDROXY-FLAVONE/CN
                E FLAVONE, 5-HYDROXY/CN
L14           1 SEA ABB=ON  "FLAVONE, 5-HYDROXY-3',4',6,7-TETRAMETHOXY-"/CN
                D SCAN

     FILE 'REGISTRY' ENTERED AT 15:18:35 ON 14 JUL 2005
                D SCAN L5
L15             STR L8
L16          50 SEA SUB=L10 SSS SAM (L11 AND L15)
L17             STR L11
L18             STR L15
                D QUE L17
                D QUE L10
L19             STR L8
                D QUE L18
L20             STR L19
                D QUE L18
                D QUE L17
                D QUE L20
L21          50 SEA SUB=L10 SSS SAM (L17 AND L20)
L22        1370 SEA SUB=L10 SSS FUL (L17 AND L20)
                SAVE TEMP L22 KHA306SUB/A

     FILE 'CAPLUS' ENTERED AT 15:36:09 ON 14 JUL 2005
L23        8031 SEA ABB=ON  L22
                D SCAN L4
L24       19296 SEA ABB=ON  (NF/OBI OR NUCLEAR FACTOR/OBI)(W)K/OBI(W)B/OB
                I

     FILE 'REGISTRY' ENTERED AT 15:38:16 ON 14 JUL 2005
                E CYCLOOXYGENASE-2/CN
L25           1 SEA ABB=ON  329900-75-6
                D SCAN

     FILE 'REGISTRY' ENTERED AT 15:39:15 ON 14 JUL 2005
                D IDE
                E NFKB/CN

     FILE 'CAPLUS' ENTERED AT 15:40:21 ON 14 JUL 2005
L26        1643 SEA ABB=ON  L22(L)(THU OR PAC OR PKT OR DMA OR BAC)/RL
L27        9735 SEA ABB=ON  L25 OR (CYCLOOXYGENASE/OBI OR CYCLO OXYGENASE/OBI
                OR COX/OBI)(W)2/OBI OR COX2/OBI
L28          61 SEA ABB=ON  (L24 OR L27) AND L22
L29          41 SEA ABB=ON  (L24 OR L27)(L)(INHIB?/OBI OR BLOCK?/OBI OR
                ANTAG?/OBI) AND L22
L30          36 SEA ABB=ON  L29 AND L26
L31           5 SEA ABB=ON  L29 NOT L30
                D SCAN
                E GEN/DT
                E REVIEW/DT
L32         103 SEA ABB=ON  L22 AND REVIEW/DT
L33          31 SEA ABB=ON  L26 AND L32

     FILE 'REGISTRY' ENTERED AT 15:45:48 ON 14 JUL 2005
                D STAT QUE L22

     FILE 'CAPLUS' ENTERED AT 15:45:48 ON 14 JUL 2005
                D QUE NOS L30
                D IBIB ED ABS HITSTR L30 1-36
```

```
            D QUE NOS L33
L34         31 SEA ABB=ON  L33 NOT L30
            D IBIB ED ABS HITSTR L34 1-31

FILE 'HOME' ENTERED AT 15:47:47 ON 14 JUL 2005
            D SAVED
            D STAT QUE L22


FILE HOME

FILE REGISTRY
Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES:   13 JUL 2005  HIGHEST RN 854992-86-2
DICTIONARY FILE UPDATES:  13 JUL 2005  HIGHEST RN 854992-86-2

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  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

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*                                                                    *
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added,    *
* effective March 20, 2005.  A new display format, IDERL, is now     *
* available and contains the CA role and document type information. *
*                                                                    *
**********************************************************************

Crossover limits have been increased.  See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

FILE STNGUIDE
FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Jul  8, 2005 (20050708/UP).

FILE CAPLUS

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FILE LAST UPDATED: 13 Jul 2005  (20050713/ED)
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